

DHV-10 SERIES, 10WATT, 2:1 INPUT RANGE

FEATURES:

- ✓ Wide input range(2:1)
- ✓ Six-side shielded metal case
- ✓ Low ripple and noise
- ✓ Over current and short circuit protection
- ✓ Typical efficiency up to 86%
- ✓ 3 year warranty



Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (mA)	Efficiency Typ.
DHV10-0511	5(4.5~9)	5	2000	78%
DHV10-0515		9	111	81%
DHV10-0512		12	833	82%
DHV10-0513		15	667	82%
DHV10-0514		24	417	84%
DHV10-0521		±5	±1000	80%
DHV10-0525		±9	±555	81%
DHV10-0522		±12	±417	82%
DHV10-0523		±15	±333	83%
DHV10-0524		±24	±208	84%
<hr/>				
DHV10-1211	12(9~18)	5	2000	79%
DHV10-1215		9	111	81%
DHV10-1212		12	833	82%
DHV10-1213		15	667	83%
DHV10-1214		24	417	84%
DHV10-1221		±5	±1000	80%
DHV10-1225		±9	±555	81%
DHV10-1222		±12	±417	83%
DHV10-1223		±15	±333	83%
DHV10-1224		±24	±208	84%
<hr/>				
DHV10-2410	24(18~36)	3.3	3000	78%
DHV10-2411		5	2000	80%
DHV10-2415		9	111	82%
DHV10-2412		12	833	84%
DHV10-2413		15	667	84%
DHV10-2414		24	417	85%
DHV10-2421		±5	±1000	80%
DHV10-2425		±9	±555	82%
DHV10-2422		±12	±417	84%
DHV10-2423		±15	±333	85%

DHV-10 SERIES, 10WATT, 2:1 INPUT RANGE

Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (mA)	Efficiency Typ.
DHV10-2424	24(18~36)	±24	±208	85%
DHV10-4811	48(36~72)	5	2000	82%
DHV10-4815		9	111	82%
DHV10-4812		12	833	83%
DHV10-4813		15	667	84%
DHV10-4814		24	417	85%
DHV10-4821		±5	±1000	81%
DHV10-4825		±9	±555	86%
DHV10-4822		±12	±417	85%
DHV10-4823		±15	±333	85%
DHV10-4824		±24	±208	86%

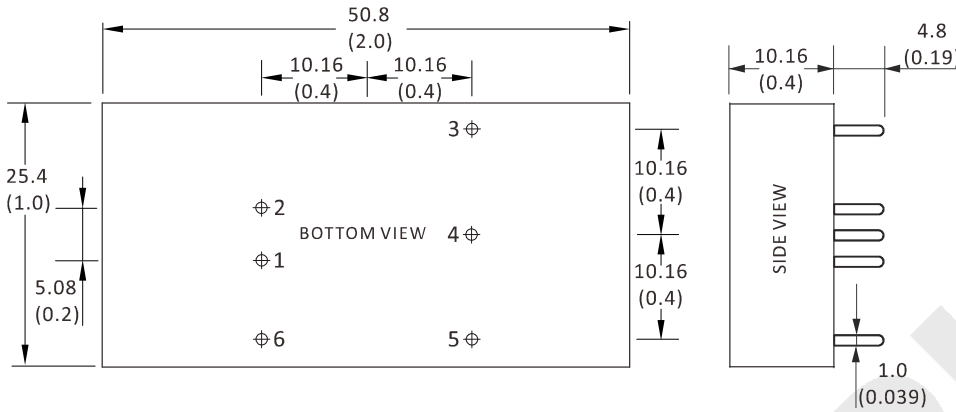
Notes:

1. Other input and output models may available on request;
2. Above models are default to metal case.

ELECTRICAL

Output voltage accuracy	+Vo	±2% max.
	-Vo	±3% max.
Line regulation	Nominal Load, full voltage	±0.5% max.
Load regulation	20% ~ 100% rated load	±1% max.
Ripple and noise	20MHz BM, full load	150mVp-p max.
Operating frequency	Typical value	300KHz typ.
Isolation voltage (<1mA/min)	Input to output	1500Vdc
Isolation resistance	---	1000mΩ
Temperature coefficient	---	±0.03%/°C max.
Operating temperature range	---	-40°C to +85°C
Storage temperature range	---	-55°C to +125°C
Short circuit protection	---	Continuous, auto-recovery
Cooling method	---	Cooling by air convection
Relative humidity	---	10%-90% max.
Weight	---	35g
MTBF	Bellcore TR-332, 25°C	1000KHrs

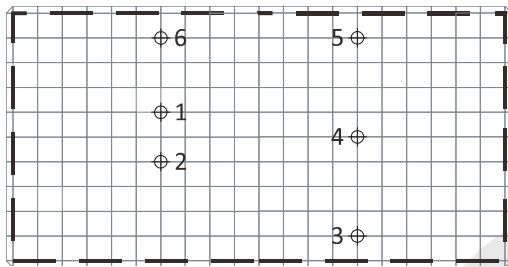
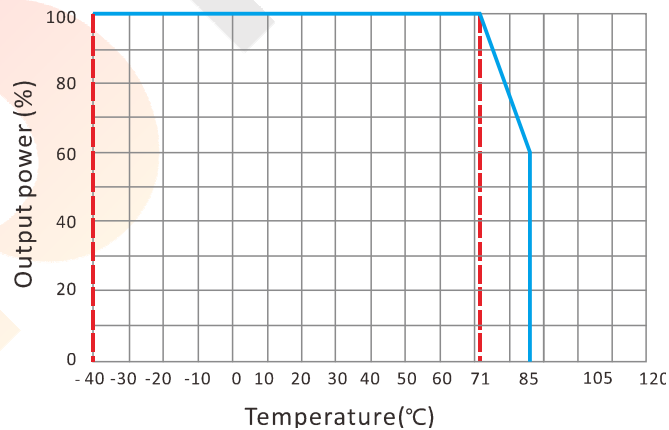
Notes: Unless otherwise specified, all the parameters of the test conditions are as follows: ambient temperature 25°C, the nominal input voltage, pure resistive nominal load.

DHV-10 SERIES, 10WATT, 2:1 INPUT RANGE
MECHANICAL

CONNECTION

PIN #	SINGLE	DUAL
1	GND	GND
2	+Vin	+Vin
3	+Vo	+Vo
4	No Pin	0V
5	0V	-Vo
6	No Pin	No Pin

Note:

* Unit is mm(inch).

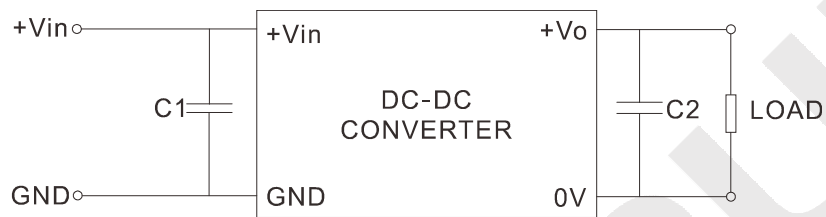
LAYOUT

ELECTRICAL CURVE


DHV-10 SERIES, 10WATT, 2:1 INPUT RANGE

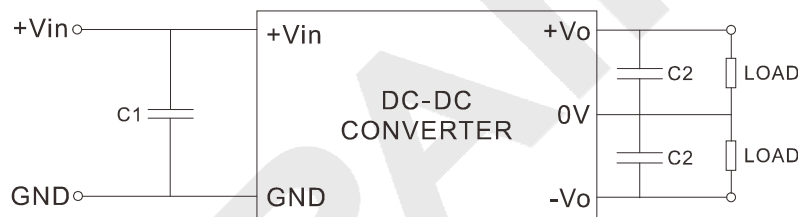
NOTES

RECOMMENDED TEST AND APPLICATION CIRCUIT

SINGLE OUTPUT



DUAL OUTPUT



NOTES

CAPACITOR SELECTION

INPUT VOLTAGE	C1	SINGLE OUTPUT	C2	DUAL OUTPUT	C2
5VDC	100 μ F	5VDC	1000 μ F	\pm 5VDC	470 μ F
12VDC	100 μ F	9VDC	470 μ F	\pm 9VDC	220 μ F
24VDC	47 μ F	12VDC	220 μ F	\pm 12VDC	100 μ F
48VDC	10 μ F	15VDC	220 μ F	\pm 15VDC	100 μ F
--	--	24VDC	100 μ F	\pm 24VDC	47 μ F



DHV-10W SERIES, 10WATT, 4:1 INPUT RANGE

FEATURES:

- ✓ Wide input range(4:1)
- ✓ Six-side shielded metal case
- ✓ Low ripple and noise
- ✓ Over current and short circuit protection
- ✓ Typical efficiency up to 84%
- ✓ 3 year warranty



Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (mA)	Efficiency Typ.	
DHV10W-2411	18(9~36)	5	2000	80%	
DHV10W-2415		9	1111	82%	
DHV10W-2412		12	833	83%	
DHV10W-2413		15	667	83%	
DHV10W-2414		24	417	84%	
DHV10W-2421		±5	±1000	80%	
DHV10W-2425		±9	±555	81%	
DHV10W-2422		±12	±417	83%	
DHV10W-2423		±15	±333	83%	
DHV10W-2424		±24	±208	84%	
DHV10W-4811		36(18~72)	5	2000	80%
DHV10W-4815			9	1111	82%
DHV10W-4812	12		833	83%	
DHV10W-4813	15		667	83%	
DHV10W-4814	24		417	83%	
DHV10W-4821	±5		±1000	80%	
DHV10W-4825	±9		±555	82%	
DHV10W-4822	±12		±417	83%	
DHV10W-4823	±15		±333	83%	
DHV10W-4824	±24		±208	84%	

Notes:

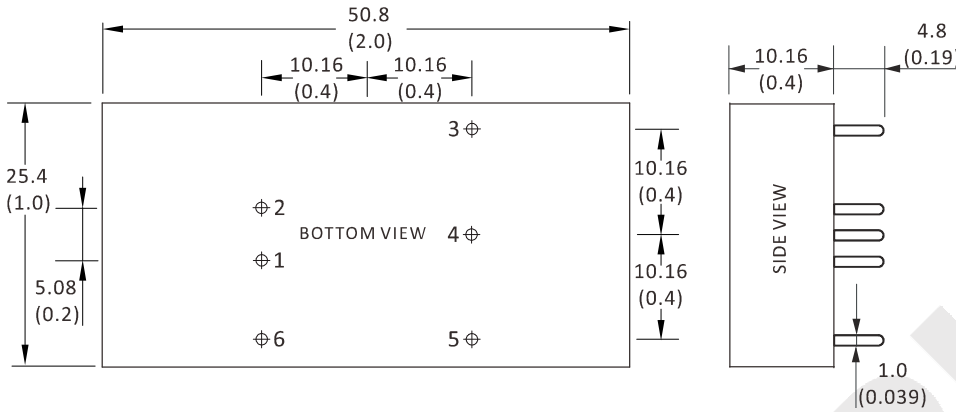
1. Other input and output models may available on request;
2. Above models are default to metal case.

DHV-10W SERIES, 10WATT, 4:1 INPUT RANGE

ELECTRICAL

Output voltage accuracy	+Vo	±2% max.
	-Vo	±3% max.
Line regulation	Nominal Load, full voltage	±0.5% max.
Load regulation	20% ~ 100% rated load	±1% max.
Ripple and noise	20MHz BM, full load	120mVp-p max.
Operating frequency	Typical value	300KHz typ.
Isolation voltage (<1mA/min)	Input to output	1500Vdc
Isolation resistance	---	1000mΩ
Temperature coefficient	---	±0.03%/°C max.
Operating temperature range	---	-40°C to +85°C
Storage temperature range	---	-55°C to +125°C
Short circuit protection	---	Continuous, auto-recovery
Cooling method	---	Cooling by air convection
Relative humidity	---	10%-90% max.
Weight	---	35g
MTBF	Bellcore TR-332, 25°C	1000KHrs

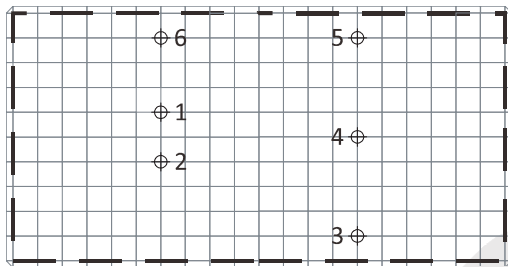
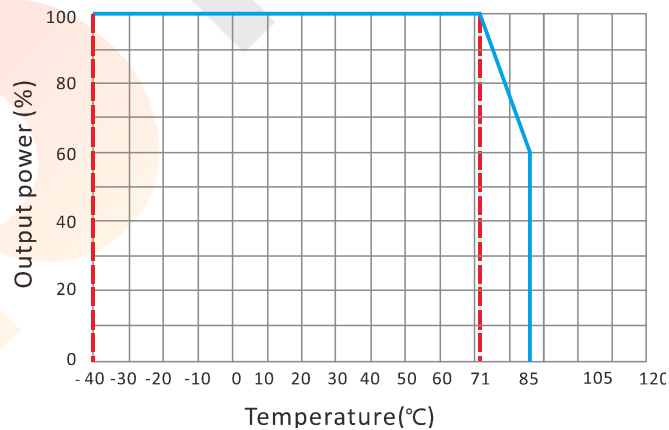
Notes: Unless otherwise specified, all the parameters of the test conditions are as follows: ambient temperature 25°C, the nominal input voltage, pure resistive nominal load.

DHV-10W SERIES, 10WATT, 4:1 INPUT RANGE
MECHANICAL

CONNECTION

PIN #	SINGLE	DUAL
1	GND	GND
2	+Vin	+Vin
3	+Vo	+Vo
4	No Pin	0V
5	0V	-Vo
6	No Pin	No Pin

Note:

* Unit is mm(inch).

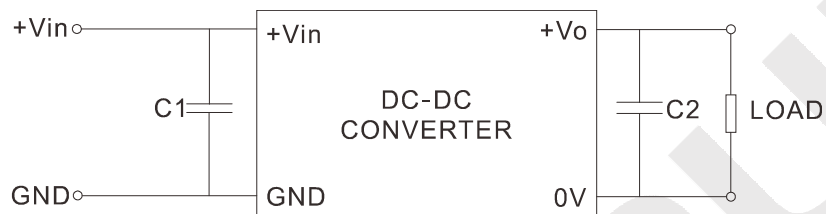
LAYOUT

ELECTRICAL CURVE


DHV-10W SERIES, 10WATT, 4:1 INPUT RANGE

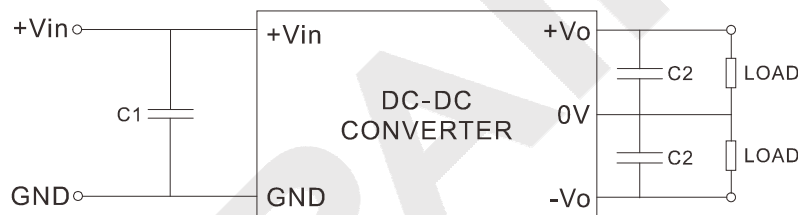
NOTES

RECOMMENDED TEST AND APPLICATION CIRCUIT

SINGLE OUTPUT



DUAL OUTPUT



CAPACITOR SELECTION

INPUT VOLTAGE	C1	SINGLE OUTPUT	C2	DUAL OUTPUT	C2
24VDC	100 μ F	5VDC	1000 μ F	\pm 5VDC	470 μ F
48VDC	47 μ F	9VDC	470 μ F	\pm 9VDC	220 μ F
--	--	12VDC	220 μ F	\pm 12VDC	100 μ F
--	--	15VDC	220 μ F	\pm 15VDC	100 μ F
--	--	24VDC	47 μ F	\pm 24VDC	47 μ F

DHV-12 SERIES, 12WATT, 2:1 INPUT RANGE

FEATURES:

- ✓ Wide input range(2:1)
- ✓ Six-side shielded metal case
- ✓ Low ripple and noise
- ✓ Over current and short circuit protection
- ✓ Typical efficiency up to 86%
- ✓ 3 year warranty



Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (mA)	Efficiency Typ.
DHV12-0511	5(4.5~9)	5	2400	80%
DHV12-0515		9	1333	82%
DHV12-0512		12	1000	83%
DHV12-0513		15	800	83%
DHV12-0514		24	500	84%
DHV12-0521		±5	±1200	80%
DHV12-0525		±9	±667	81%
DHV12-0522		±12	±500	83%
DHV12-0523		±15	±400	84%
DHV12-0524		±24	±250	84%
DHV12-1211	12(9~18)	5	2400	80%
DHV12-1215		9	1333	82%
DHV12-1212		12	1000	83%
DHV12-1213		15	800	84%
DHV12-1214		24	500	85%
DHV12-1221		±5	±1200	80%
DHV12-1225		±9	±667	81%
DHV12-1222		±12	±500	83%
DHV12-1223		±15	±400	84%
DHV12-1224		±24	±250	84%
DHV12-2411	24(18~36)	5	2400	80%
DHV12-2415		9	1333	82%
DHV12-2412		12	1000	84%
DHV12-2413		15	800	85%
DHV12-2414		24	500	85%
DHV12-2421		±5	±1200	80%
DHV12-2426		±9	±667	82%
DHV12-2422		±12	±500	84%
DHV12-2423		±15	±400	85%
DHV12-2425		±18	±333	80%
DHV12-2424	±24	±250	86%	

DHV-12 SERIES, 12WATT, 2:1 INPUT RANGE

Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (mA)	Efficiency Typ.
DHV12-4811	48(36~72)	5	2400	83%
DHV12-4815		9	1333	82%
DHV12-4812		12	1000	83%
DHV12-4813		15	800	84%
DHV12-4814		24	500	85%
DHV12-4821		±5	±1200	81%
DHV12-4825		±9	±667	86%
DHV12-4822		±12	±500	85%
DHV12-4823		±15	±400	85%
DHV12-4824		±24	±250	86%

Notes:

1. Other input and output models may available on request;
2. Above models are default to metal case.

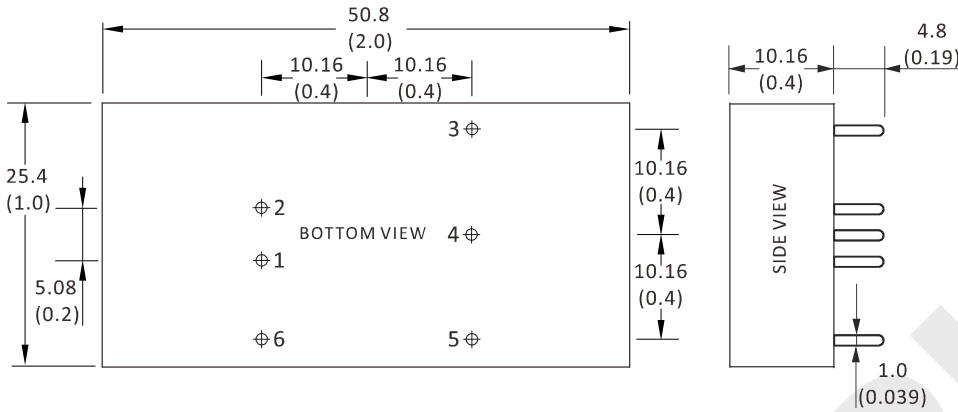
ELECTRICAL

Output voltage accuracy	+Vo -Vo	±2% max. ±3% max.
Line regulation	Nominal Load, full voltage	±0.5% max.
Load regulation	20% ~ 100% rated load	±1% max.
Ripple and noise	20MHz BM, full load	150mVp-p max.
Operating frequency	Typical value	300KHz typ.
Isolation voltage (<1mA/min)	Input to output	1500Vdc
Isolation resistance	---	1000mΩ
Temperature coefficient	---	±0.03%/°C max.
Operating temperature range	---	-40°C to +85°C
Storage temperature range	---	-55°C to +125°C
Short circuit protection	---	Continuous, auto-recovery
Cooling method	---	Cooling by air convection
Relative humidity	---	10%-90% max.
Weight	---	35g
MTBF	Bellcore TR-332, 25°C	1000KHrs

Notes: Unless otherwise specified, all the parameters of the test conditions are as follows: ambient temperature 25°C, the nominal input voltage, pure resistive nominal load.

DHV-12 SERIES, 12WATT, 2:1 INPUT RANGE

MECHANICAL



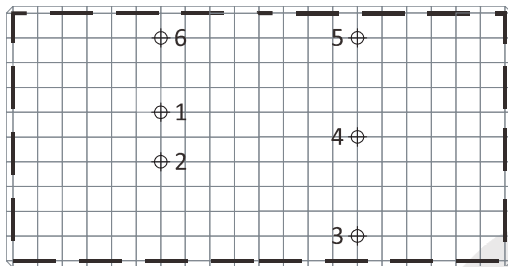
CONNECTION

PIN #	SINGLE	DUAL
1	GND	GND
2	+Vin	+Vin
3	+Vo	+Vo
4	No Pin	0V
5	0V	-Vo
6	No Pin	No Pin

Note:

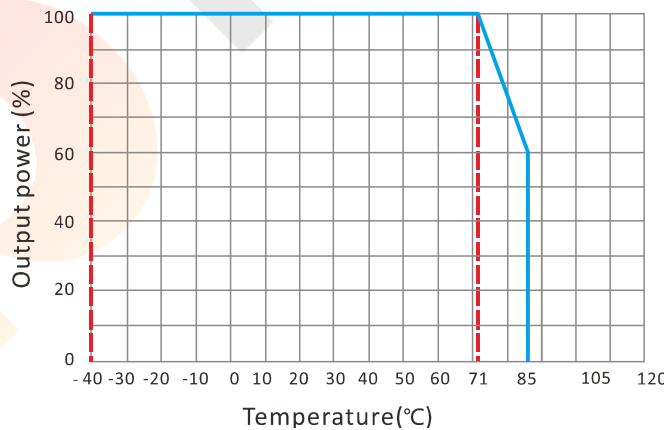
* Unit is mm(inch).

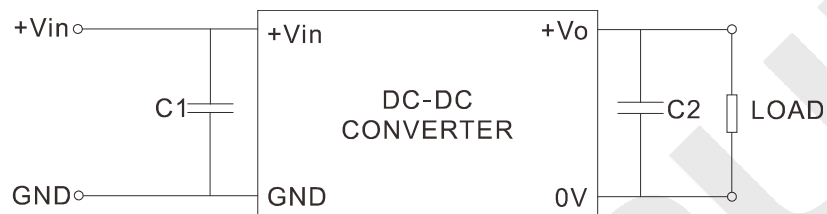
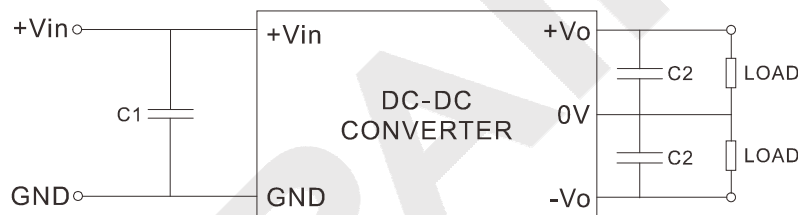
LAYOUT



Unit: mm(inch)
 PCB vertical view
 Grid spacing: 2.54mm(0.1inch)

ELECTRICAL CURVE



DHV-12 SERIES, 12WATT, 2:1 INPUT RANGE
NOTES
RECOMMENDED TEST AND APPLICATION CIRCUIT
SINGLE OUTPUT

DUAL OUTPUT

CAPACITOR SELECTION

INPUT VOLTAGE	C1	SINGLE OUTPUT	C2	DUAL OUTPUT	C2
5VDC	220 μ F	5VDC	1000 μ F	\pm 5VDC	470 μ F
12VDC	220 μ F	9VDC	470 μ F	\pm 9VDC	220 μ F
24VDC	100 μ F	12VDC	220 μ F	\pm 12VDC	100 μ F
48VDC	47 μ F	15VDC	220 μ F	\pm 15VDC	100 μ F
--	--	24VDC	100 μ F	\pm 24VDC	47 μ F

DHV-12W SERIES, 12WATT, 4:1 INPUT RANGE
FEATURES:

- ✓ Wide input range(4:1)
- ✓ Six-side shielded metal case
- ✓ Low ripple and noise
- ✓ Over current and short circuit protection
- ✓ Typical efficiency up to 85%
- ✓ 3 year warranty



Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (mA)	Efficiency Typ.	
DHV12W-2411	18(9~36)	5	2400	81%	
DHV12W-2415		9	1333	83%	
DHV12W-2412		12	1000	84%	
DHV12W-2413		15	800	84%	
DHV12W-2414		24	500	85%	
DHV12W-2421		±5	±1200	81%	
DHV12W-2425		±9	±667	82%	
DHV12W-2422		±12	±500	84%	
DHV12W-2423		±15	±400	84%	
DHV12W-2424		±24	±250	85%	
DHV12W-4811		36(18~72)	5	2400	81%
DHV12W-4815			9	1333	83%
DHV12W-4812	12		1000	84%	
DHV12W-4813	15		800	84%	
DHV12W-4814	24		500	84%	
DHV12W-4821	±5		±1200	81%	
DHV12W-4825	±9		±667	83%	
DHV12W-4822	±12		±500	84%	
DHV12W-4823	±15		±400	84%	
DHV12W-4824	±24		±250	85%	

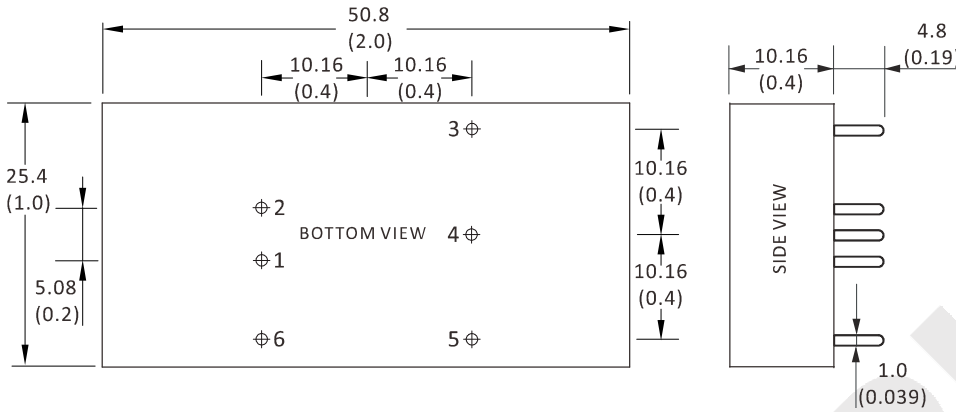
Notes:

1. Other input and output models may available on request;
2. Above models are default to metal case.

DHV-12W SERIES, 12WATT, 4:1 INPUT RANGE
ELECTRICAL

Output voltage accuracy	+Vo	±2% max.
	-Vo	±3% max.
Line regulation	Nominal Load, full voltage	±0.5% max.
Load regulation	20% ~ 100% rated load	±1% max.
Ripple and noise	20MHz BM, full load	120mVp-p max.
Operating frequency	Typical value	300KHz typ.
Isolation voltage (<1mA/min)	Input to output	1500Vdc
Isolation resistance	---	1000mΩ
Temperature coefficient	---	±0.03%/°C max.
Operating temperature range	---	-40°C to +85°C
Storage temperature range	---	-55°C to +125°C
Short circuit protection	---	Continuous, auto-recovery
Cooling method	---	Cooling by air convection
Relative humidity	---	10%-90% max.
Weight	---	35g
MTBF	Bellcore TR-332, 25°C	1000KHrs

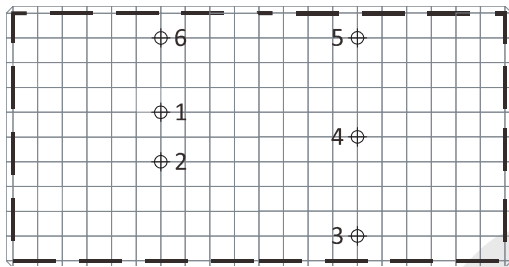
Notes: Unless otherwise specified, all the parameters of the test conditions are as follows: ambient temperature 25°C, the nominal input voltage, pure resistive nominal load.

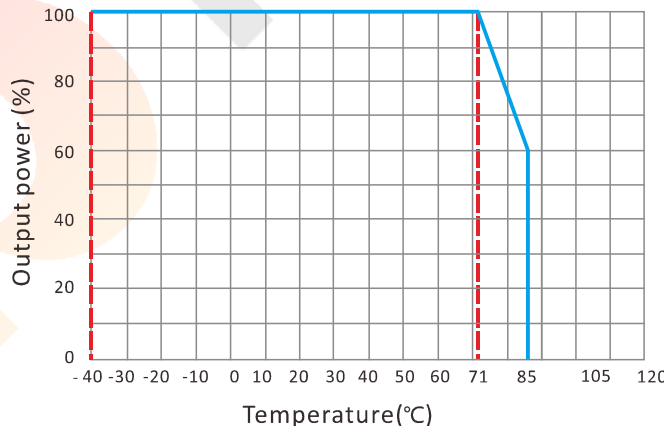
DHV-12W SERIES, 12WATT, 4:1 INPUT RANGE
MECHANICAL

CONNECTION

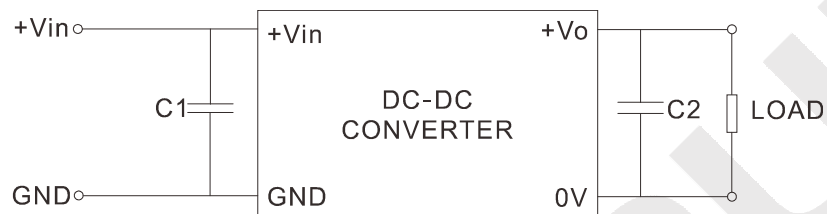
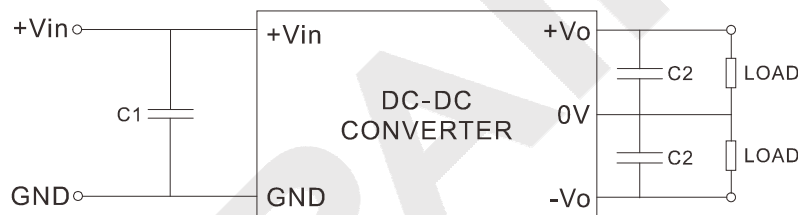
PIN #	SINGLE	DUAL
1	GND	GND
2	+Vin	+Vin
3	+Vo	+Vo
4	No Pin	0V
5	0V	-Vo
6	No Pin	No Pin

Note:

* Unit is mm(inch).

LAYOUT

 Unit: mm(inch)
 PCB vertical view
 Grid spacing: 2.54mm(0.1inch)

ELECTRICAL CURVE


DHV-12W SERIES, 12WATT, 4:1 INPUT RANGE
NOTES
RECOMMENDED TEST AND APPLICATION CIRCUIT
SINGLE OUTPUT

DUAL OUTPUT

CAPACITOR SELECTION

INPUT VOLTAGE	C1	SINGLE OUTPUT	C2	DUAL OUTPUT	C2
24VDC	100 μ F	5VDC	1000 μ F	\pm 5VDC	470 μ F
48VDC	47 μ F	9VDC	470 μ F	\pm 9VDC	220 μ F
--	--	12VDC	220 μ F	\pm 12VDC	100 μ F
--	--	15VDC	220 μ F	\pm 15VDC	100 μ F
--	--	24VDC	47 μ F	\pm 24VDC	47 μ F

DHV-15 SERIES, 15WATT, 2:1 INPUT RANGE

FEATURES:

- ✓ Wide input range(2:1)
- ✓ Six-side shielded metal case
- ✓ Low ripple and noise
- ✓ Over current and short circuit protection
- ✓ Typical efficiency up to 86%
- ✓ 3 year warranty



Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (mA)	Efficiency Typ.
DHV15-0511	5(4.5~9)	5	3000	79%
DHV15-0515		9	1667	82%
DHV15-0512		12	1250	84%
DHV15-0513		15	1000	83%
DHV15-0514		24	625	84%
DHV15-0521		±5	±1500	80%
DHV15-0525		±9	±833	82%
DHV15-0522		±12	±625	82%
DHV15-0523		±15	±500	83%
DHV15-0524		±24	±313	83%
DHV15-1211	12(9~18)	5	3000	79%
DHV15-1215		9	1667	82%
DHV15-1212		12	1250	84%
DHV15-1213		15	1000	84%
DHV15-1214		24	625	84%
DHV15-1221		±5	±1500	80%
DHV15-1225		±9	±833	82%
DHV15-1222		±12	±625	84%
DHV15-1223		±15	±500	84%
DHV15-1224		±24	±313	84%
DHV15-2411	24(18~36)	5	3000	80%
DHV15-2415		9	1667	82%
DHV15-2412		12	1250	84%
DHV15-2413		15	1000	84%
DHV15-2414		24	625	85%
DHV15-2421		±5	±1500	80%
DHV15-2425		±9	±833	85%
DHV15-2422		±12	±625	83%
DHV15-2423		±15	±500	84%
DHV15-2424		±24	±313	84%

DHV-15 SERIES, 15WATT, 2:1 INPUT RANGE

Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (mA)	Efficiency Typ.
DHV15-4811	48(36~72)	5	3000	80%
DHV15-4815		9	1667	83%
DHV15-4812		12	1250	84%
DHV15-4813		15	1000	85%
DHV15-4814		24	625	86%
DHV15-4821		±5	±1500	81%
DHV15-4825		±9	±833	82%
DHV15-4822		±12	±625	84%
DHV15-4823		±15	±500	85%
DHV15-4824		±24	±313	85%

Notes:

1. Other input and output models may available on request;
2. Above models are default to metal case.

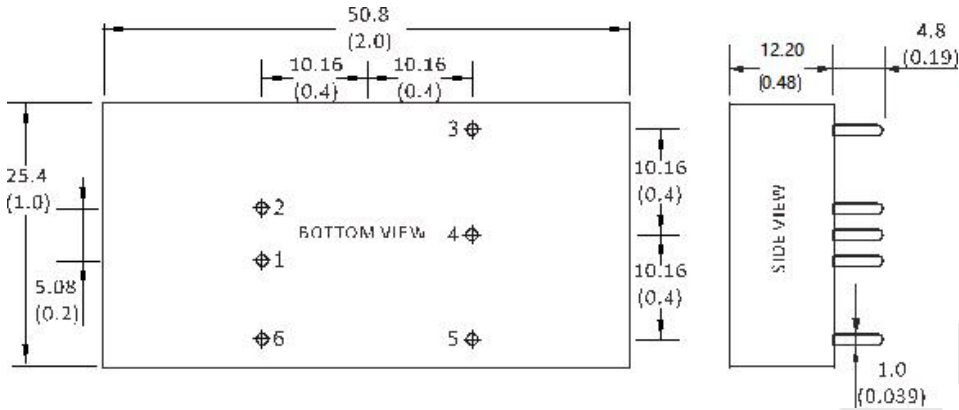
ELECTRICAL

Output voltage accuracy	+Vo	±2% max.
	-Vo	±3% max.
Line regulation	Nominal Load, full voltage	±0.5% max.
Load regulation	20% ~ 100% rated load	±1% max.
Ripple and noise	20MHz BM, full load	120mVp-p max.
Operating frequency	Typical value	300KHz typ.
Isolation voltage (<1mA/min)	Input to output	1500Vdc
Isolation resistance	---	1000mΩ
Temperature coefficient	---	±0.03%/°C max.
Operating temperature range	---	-40°C to +85°C
Storage temperature range	---	-55°C to +125°C
Short circuit protection	---	Continuous, auto-recovery
Cooling method	---	Cooling by air convection
Relative humidity	---	10%-90% max.
Weight	---	35g
MTBF	Bellcore TR-332, 25°C	1000KHrs

Notes: Unless otherwise specified, all the parameters of the test conditions are as follows: ambient temperature 25°C, the nominal input voltage, pure resistive nominal load.

DHV-15 SERIES, 15WATT, 2:1 INPUT RANGE

MECHANICAL



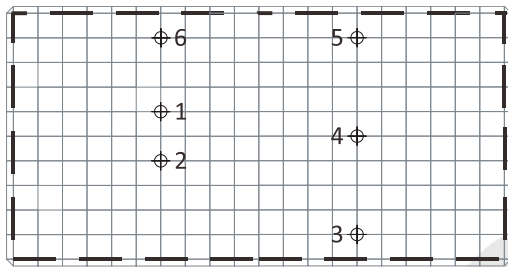
CONNECTION

PIN #	SINGLE	DUAL
1	GND	GND
2	+Vin	+Vin
3	+Vo	+Vo
4	No Pin	0V
5	0V	-Vo
6	No Pin	No Pin

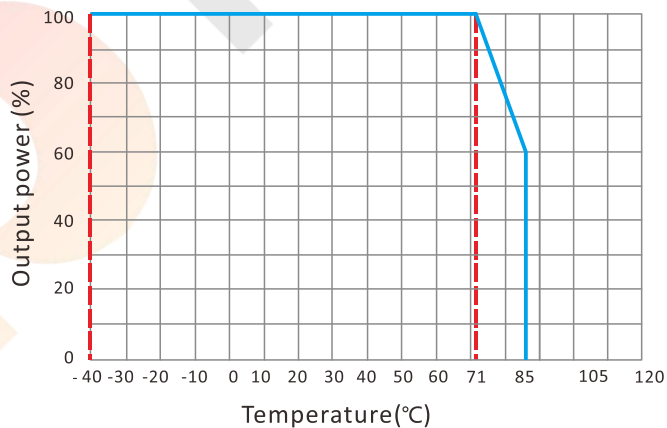
Note:

* Unit is mm(inch).

LAYOUT



ELECTRICAL CURVE

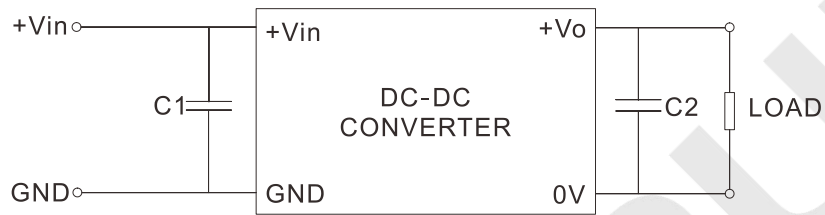


DHV-15 SERIES, 15WATT, 2:1 INPUT RANGE

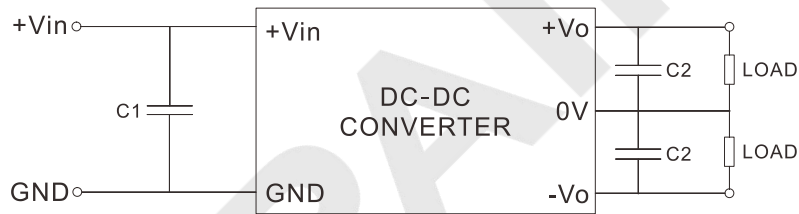
NOTES

RECOMMENDED TEST AND APPLICATION CIRCUIT

SINGLE OUTPUT



DUAL OUTPUT



CAPACITOR SELECTION

INPUT VOLTAGE	C1	SINGLE OUTPUT	C2	DUAL OUTPUT	C2
5VDC	220 μ F	5VDC	1000 μ F	\pm 5VDC	470 μ F
12VDC	220 μ F	9VDC	680 μ F	\pm 9VDC	220 μ F
24VDC	100 μ F	12VDC	220 μ F	\pm 12VDC	100 μ F
48VDC	47 μ F	15VDC	220 μ F	\pm 15VDC	100 μ F
--	--	24VDC	100 μ F	\pm 24VDC	47 μ F

DHV-15W SERIES, 15WATT, 4:1 INPUT RANGE

FEATURES:

- ✓ Wide input range(4:1)
- ✓ Six-side shielded metal case
- ✓ Low ripple and noise
- ✓ Over current and short circuit protection
- ✓ Typical efficiency up to 85%
- ✓ 3 year warranty



Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (mA)	Efficiency Typ.
DHV15W-2411	24(9~36)	5	3000	81%
DHV15W-2415		9	1667	83%
DHV15W-2412		12	1250	84%
DHV15W-2413		15	1000	84%
DHV15W-2414		24	625	85%
DHV15W-2421		±5	±1500	81%
DHV15W-2425		±9	±833	82%
DHV15W-2422		±12	±625	84%
DHV15W-2423		±15	±500	84%
DHV15W-2424		±24	±313	85%
DHV15W-4811	48(18~72)	5	3000	81%
DHV15W-4815		9	1667	83%
DHV15W-4812		12	1250	84%
DHV15W-4813		15	1000	84%
DHV15W-4814		24	625	85%
DHV15W-4821		±5	±1500	81%
DHV15W-4825		±9	±833	83%
DHV15W-4822		±12	±625	84%
DHV15W-4823		±15	±500	84%
DHV15W-4824		±24	±313	85%

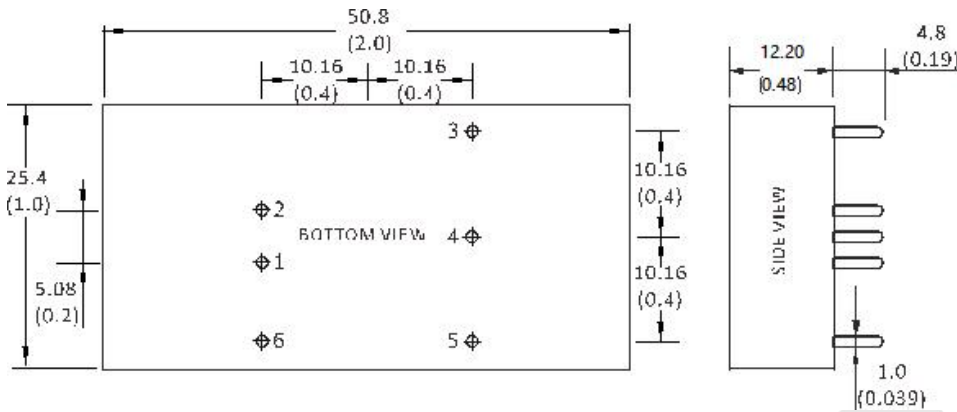
Notes:

1. Other input and output models may available on request;
2. Above models are default to metal case.

DHV-15W SERIES, 15WATT, 4:1 INPUT RANGE

ELECTRICAL		
Output voltage accuracy	+Vo	±2% max.
	-Vo	±3% max.
Line regulation	Nominal Load, full voltage	±0.5% max.
Load regulation	20% ~ 100% rated load	±1% max.
Ripple and noise	20MHz BM, full load	150mVp-p max.
Operating frequency	Typical value	300KHz typ.
Isolation voltage (<1mA/min)	Input to output	1500Vdc
Isolation resistance	---	1000mΩ
Temperature coefficient	---	±0.03%/°C max.
Operating temperature range	---	-40°C to +85°C
Storage temperature range	---	-55°C to +125°C
Short circuit protection	---	Continuous, auto-recovery
Cooling method	---	Cooling by air convection
Relative humidity	---	10%-90% max.
Weight	---	35g
MTBF	Bellcore TR-332, 25°C	1000KHrs

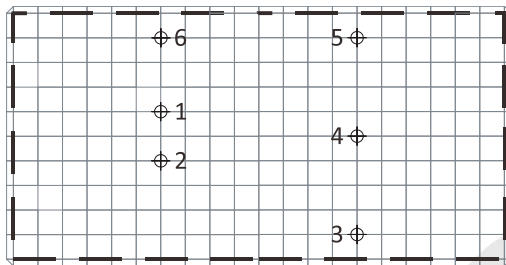
Notes: Unless otherwise specified, all the parameters of the test conditions are as follows: ambient temperature 25°C, the nominal input voltage, pure resistive nominal load.

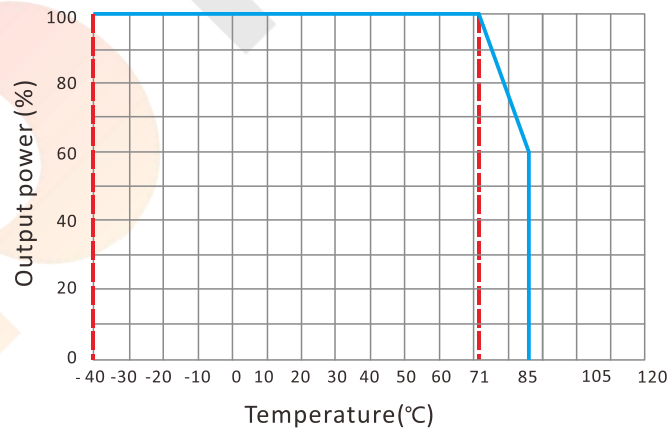
DHV-15W SERIES, 15WATT, 4:1 INPUT RANGE
MECHANICAL

CONNECTION

PIN #	SINGLE	DUAL
1	GND	GND
2	+Vin	+Vin
3	+Vo	+Vo
4	No Pin	0V
5	0V	-Vo
6	No Pin	No Pin

Note:

* Unit is mm(inch).

LAYOUT

 Unit: mm(inch)
 PCB vertical view
 Grid spacing: 2.54mm(0.1inch)

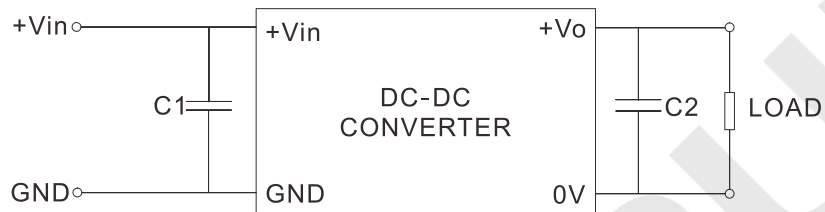
ELECTRICAL CURVE


DHV-15W SERIES, 15WATT, 4:1 INPUT RANGE

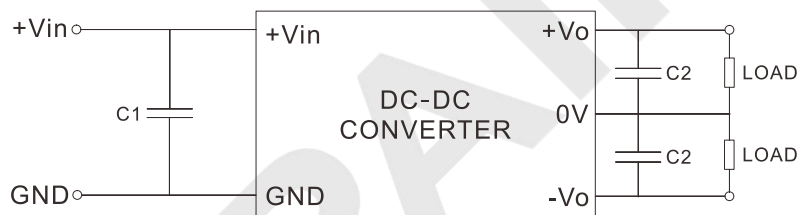
NOTES

RECOMMENDED TEST AND APPLICATION CIRCUIT

SINGLE OUTPUT



DUAL OUTPUT



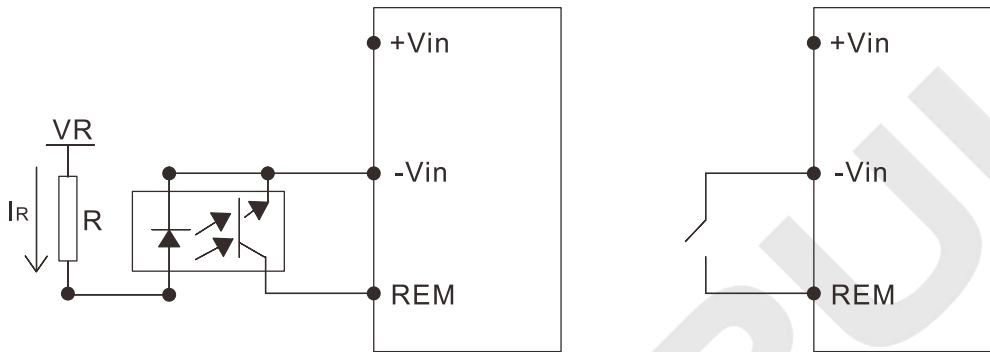
CAPACITOR SELECTION

INPUT VOLTAGE	C1	SINGLE OUTPUT	C2	DUAL OUTPUT	C2
24VDC	100 μ F	5VDC	1000 μ F	\pm 5VDC	470 μ F
48VDC	47 μ F	9VDC	470 μ F	\pm 9VDC	220 μ F
--	--	12VDC	220 μ F	\pm 12VDC	100 μ F
--	--	15VDC	220 μ F	\pm 15VDC	100 μ F
--	--	24VDC	100 μ F	\pm 24VDC	47 μ F

DHV-15W SERIES, 15WATT, 4:1 INPUT RANGE

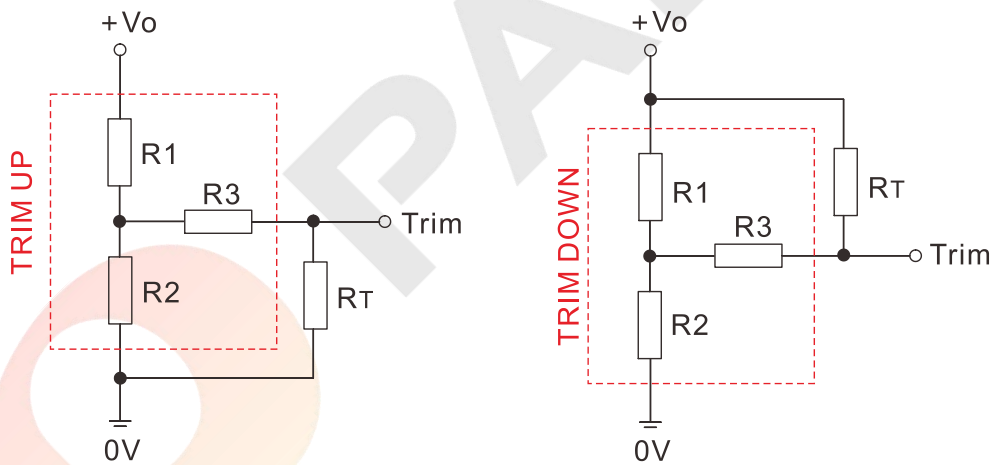
NOTES

***APPLICATION FOR REM PIN**



The REM pin can be hang on if unnecessary to use, the output current will shut off when REM voltage lower than 0.5Vdc.

***APPLICATION FOR TRIM PIN**



$$\text{TRIM UP: } R_T = \frac{xR_2}{R_2-x} - R_3 \quad x = \frac{V_{ref}}{V_o' - V_{ref}} * R_1$$

$$\text{TRIM DOWN: } R_T = \frac{xR_1}{R_1-x} - R_3 \quad x = \frac{V_o' - V_{ref}}{V_{ref}} * R_2$$

Vo[Vdc]	R1[KΩ]	R2[KΩ]	R3[KΩ]	Vref[Vdc]
5	2.883	2.864	10	2.5
12	10.971	2.864	17.8	2.5
15	14.497	2.864	17.8	2.5
24	24.872	2.863	20	2.5

RT represents Trim resistor

X represents self-defined parameters without real meaning

DHV-30W SERIES, 30WATT, 4:1 INPUT RANGE
FEATURES:

- ✓ Wide input range(4:1)
- ✓ Six-side shielded metal case
- ✓ Low ripple and noise
- ✓ Over current and short circuit protection
- ✓ 3 year warranty



Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (mA)	Efficiency Typ.
DHV30W-2410	24(9~36)	3.3	6000	86%
DHV30W-2411		5	6000	88%
DHV30W-2413		12	2500	89%
DHV30W-2414		15	2000	89%
DHV30W-2415		24	1250	90%
DHV30W-4810	48(18~72)	3.3	6000	86%
DHV30W-4811		5	6000	88%
DHV30W-4813		12	2500	87%
DHV30W-4814		15	2000	89%
DHV30W-4815		24	1250	90%

Notes:

1. Other input and output models may available on request;
2. Above models are default to metal case;
3. Add suffix "C" for CTRL pin function.

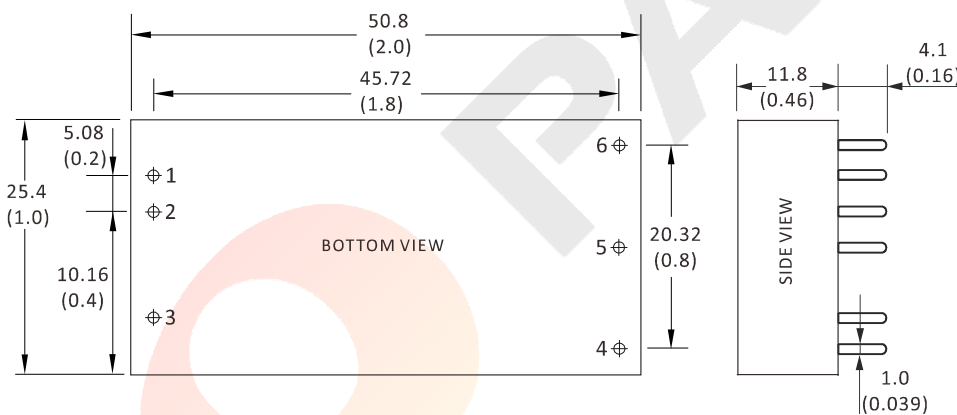
ELECTRICAL

Output voltage accuracy		±2% max.
Line regulation	Nominal Load, full voltage	±1% max.
Load regulation	20% ~ 100% rated load	±2% max.
Ripple and noise	20MHz BM, full load	100mVp-p max.
Operating frequency	Typical value	300KHz typ.
Isolation capacitor	Typical value	2000pF
Isolation voltage (<0.5mA/min)	Input to output	1500Vdc
Operating temperature range	---	-40°C to +85°C
Storage temperature range	---	-55°C to +125°C
Maximum case temperature		+105°C
Over voltage protection		110%~150%Vo
Over current protection		110%~200%Io typ.

DHV-30W SERIES, 30WATT, 4:1 INPUT RANGE
ELECTRICAL

Output adjustment	Trim pin function	±10% typ.
Short circuit protection	Hiccup mode, continuous, auto-recovery	
Cooling method	---	Cooling by air convection
Relative humidity	---	5%-95%, no condensing
Weight	---	28g
MTBF	Bellcore TR-332, 25°C	200KHrs

Notes: Unless otherwise specified, all the parameters of the test conditions are as follows: ambient temperature 25°C, the nominal input voltage, pure resistive nominal load.

MECHANICAL

CONNECTION

PIN #	SINGLE
1	+Vin
2	-Vin
3	No Pin
4	TRIM
5	-Vo
6	+Vo

CONNECTION - "CTRL"

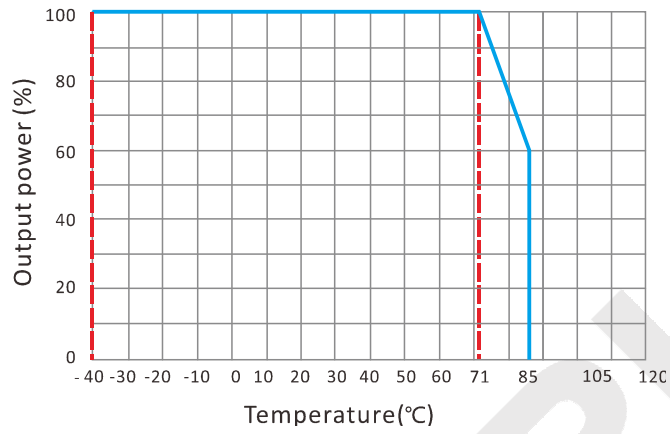
PIN #	SINGLE
1	+Vin
2	-Vin
3	CTRL
4	TRIM
5	-Vo
6	+Vo

Note:

* Unit is mm(inch).

DHV-30W SERIES, 30WATT, 4:1 INPUT RANGE

ELECTRICAL CURVE



DMV-6 SERIES, 6WATT, 2:1 INPUT RANGE

FEATURES:

- ✓ 1500Vdc isolation voltage
- ✓ Metal case with low ripple and noise
- ✓ Short circuit and input under voltage protection
- ✓ Operating temperature range -40°C to +85°C
- ✓ 3 year warranty



Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (mA)	Efficiency Typ.
DMV6-0511	5(4.5~9)	3.3	1500	72%
DMV6-0512		5	1200	76%
DMV6-0516		9	667	77%
DMV6-0513		12	500	78%
DMV6-0514		15	400	79%
DMV6-0515		24	250	79%
DMV6-0521		±5	±600	75%
DMV6-0522		±9	±333	76%
DMV6-0523		±12	±250	78%
DMV6-0524		±15	±200	79%
DMV6-0525		±24	±125	78%
DMV6-1211	12(9~18)	3.3	1500	72%
DMV6-1212		5	1200	76%
DMV6-1216		9	667	77%
DMV6-1213		12	500	78%
DMV6-1214		15	400	79%
DMV6-1215		24	250	80%
DMV6-1221		±5	±600	79%
DMV6-1222		±9	±333	81%
DMV6-1223		±12	±250	81%
DMV6-1224		±15	±200	82%
DMV6-1225		±24	±125	82%
DMV6-2411	24(18~36)	3.3	1500	78%
DMV6-2412		5	1200	82%
DMV6-2416		9	667	80%
DMV6-2413		12	500	81%
DMV6-2414		15	400	82%
DMV6-2415		24	250	83%
DMV6-2421		±5	±600	80%

DMV-6 SERIES, 6WATT, 2:1 INPUT RANGE

Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (mA)	Efficiency Typ.
DMV6-2422	24(18~36)	±9	±333	80%
DMV6-2423		±12	±250	82%
DMV6-2424		±15	±200	84%
DMV6-2425		±24	±125	84%
DMV6-4811	48(36~72)	3.3	1500	78%
DMV6-4812		5	1200	81%
DMV6-4816		9	667	83%
DMV6-4813		12	500	83%
DMV6-4814		15	400	84%
DMV6-4815		24	250	85%
DMV6-4821		±5	±600	80%
DMV6-4822		±9	±333	80%
DMV6-4823		±12	±250	82%
DMV6-4824		±15	±200	84%
DMV6-4825		±24	±125	84%

**Notes: 1. Other input and output models may available on request;
2. Above items are default to metal case.**

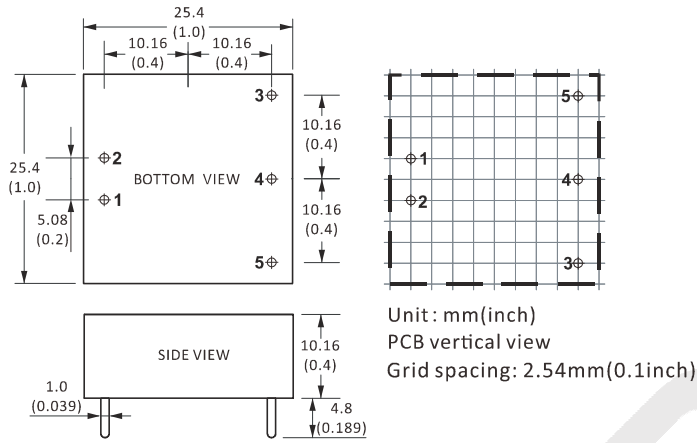
ELECTRICAL

Output voltage accuracy (Full voltage, full load)	+Vo -Vo	±1% max. ±2% max.
Line regulation	Nominal Load, full voltage	±0.5% max.
Load regulation	20% ~ 100% full load	±1% max.
Ripple and noise	20MHz BM, full load	120mVp-p max.
Operating frequency	Typical value	300KHz typ.
Isolation voltage (<1mA/min)	Input to output	1500Vdc
Isolation resistance	---	1000mΩ
Temperature coefficient	---	±0.02%/°C max.
Operating temperature range	---	-40°C to +85°C
Storage temperature range	---	-55°C to +125°C
Short circuit protection	---	Continuous, auto-recovery
Relative humidity	---	10%-90% max.
MTBF	Bellcore TR-332, 25°C	1000KHrs
Weight	---	12g

Notes: All the parameters are measured at 25°C ambient temperature, humidity < 75%, nominal input voltage, full load and after warm-up, unless otherwise specified.

DMV-6 SERIES, 6WATT, 2:1 INPUT RANGE

MECHANICAL

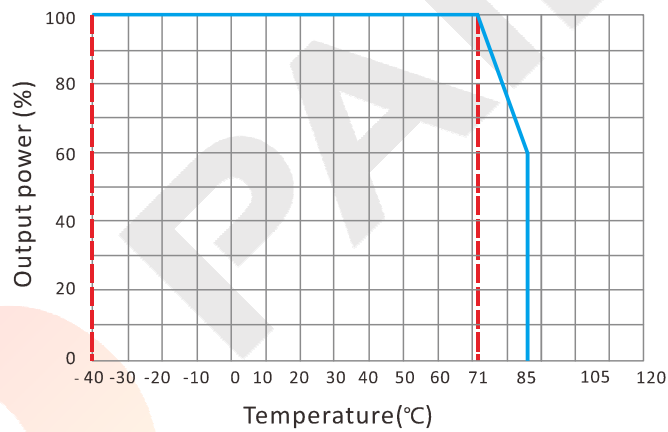


CONNECTION

PIN #	SINGLE	DUAL
1	GND	GND
2	+Vin	+Vin
3	+Vo	+Vo
4	No Pin	0V
5	0V	-Vo

Note:
Unit is mm(inch).

ELECTRICAL CURVE

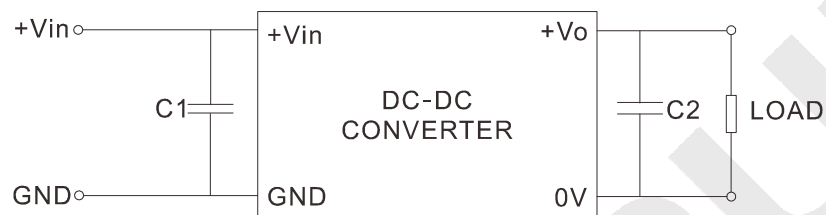


DMV-6 SERIES, 6WATT, 2:1 INPUT RANGE

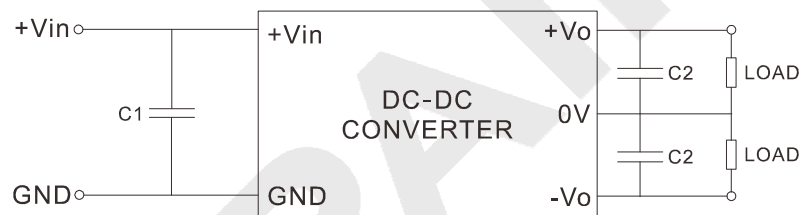
NOTES

RECOMMENDED TEST AND APPLICATION CIRCUIT

SINGLE OUTPUT



DUAL OUTPUT



CAPACITOR SELECTION

INPUT VOLTAGE	C1	SINGLE OUTPUT	C2	DUAL OUTPUT	C2
5VDC	100 μ F	5VDC	1000 μ F	\pm 5VDC	470 μ F
12VDC	47 μ F	9VDC	470 μ F	\pm 9VDC	220 μ F
24VDC	47 μ F	12VDC	220 μ F	\pm 12VDC	100 μ F
48VDC	10 μ F	15VDC	220 μ F	\pm 15VDC	100 μ F
--	--	24VDC	100 μ F	\pm 24VDC	47 μ F

DMV-6W SERIES, 6WATT, 4:1 INPUT RANGE
FEATURES:

- ✓ 1500Vdc isolation voltage
- ✓ Metal case with low ripple and noise
- ✓ Short circuit and input under voltage protection
- ✓ Operating temperature range -40°C to +85°C
- ✓ 3 year warranty



Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (mA)	Efficiency Typ.	
DMV6W-2411	24(9~36)	3.3	1500	78%	
DMV6W-2412		5	1200	80%	
DMV6W-2416		9	667	81%	
DMV6W-2413		12	500	82%	
DMV6W-2414		15	400	83%	
DMV6W-2415		24	250	84%	
DMV6W-2421		±5	±600	80%	
DMV6W-2424		±9	±333	81%	
DMV6W-2422		±12	±250	82%	
DMV6W-2423		±15	±200	82%	
DMV6W-2425		±24	±125	83%	
DMV6W-4811		48(18~72)	3.3	1500	78%
DMV6W-4812			5	1200	80%
DMV6W-4816			9	667	81%
DMV6W-4813			12	500	82%
DMV6W-4814	15		400	82%	
DMV6W-4815	24		250	83%	
DMV6W-4821	±5		±600	80%	
DMV6W-4824	±9		±333	81%	
DMV6W-4822	±12		±250	82%	
DMV6W-4823	±15		±200	83%	
DMV6W-4825	±24	±125	84%		

Notes: 1. Other input and output models may available on request;
2. Above items are default to metal case.

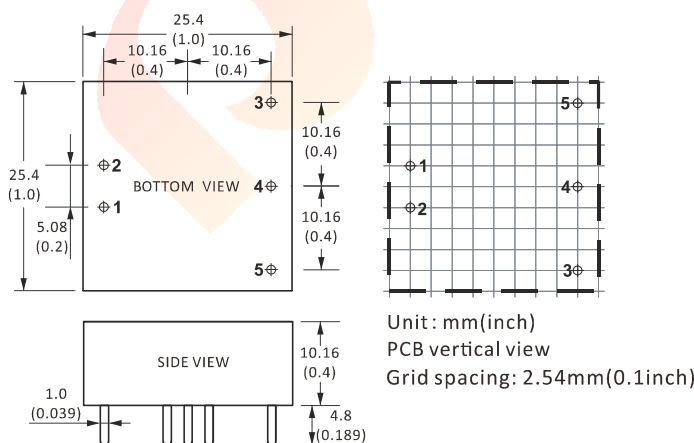
DMV-6W SERIES, 6WATT, 4:1 INPUT RANGE

ELECTRICAL

Output voltage accuracy (Full voltage, full load)	+Vo -Vo	±2% max. ±3% max.
Line regulation	Nominal Load, full voltage	±0.5% max.
Load regulation	20% ~ 100% full load	±1% max.
Ripple and noise	20MHz BM, full load	100mVp-p max.
Operating frequency	Typical value	300KHz typ.
Isolation voltage (<1mA/min)	Input to output	1500Vdc
Isolation resistance	---	1000mΩ
Temperature coefficient	---	±0.03%/°C max.
Operating temperature range	---	-40°C to +85°C
Storage temperature range	---	-55°C to +125°C
Short circuit protection	---	Continuous, auto-recovery
Relative humidity	---	10%-90% max.
MTBF	Bellcore TR-332, 25°C	1000KHrs
Weight	---	12g

Notes: All the parameters are measured at 25°C ambient temperature, humidity < 75%, nominal input voltage, full load and after warm-up, unless otherwise specified.

MECHANICAL



CONNECTION

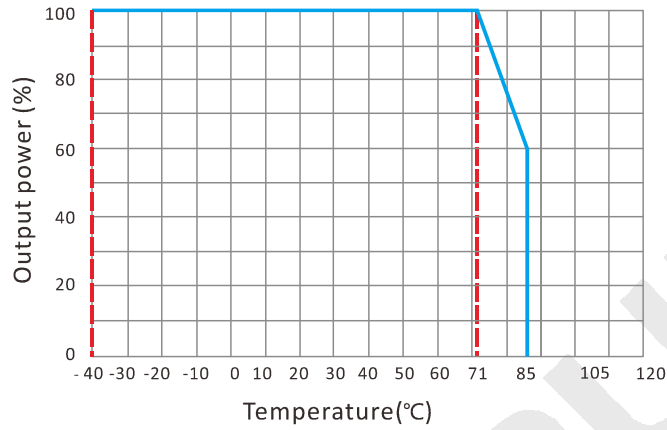
PIN #	SINGLE	DUAL
1	GND	GND
2	+Vin	+Vin
3	+Vo	+Vo1
4	No Pin	0V
5	0V	-Vo2

Note:

* Unit is mm(inch).

DMV-6W SERIES, 6WATT, 4:1 INPUT RANGE

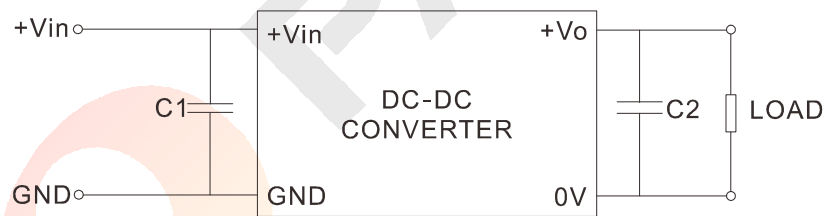
ELECTRICAL CURVE



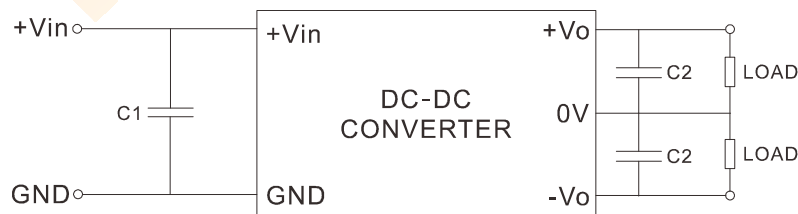
NOTES

RECOMMENDED TEST AND APPLICATION CIRCUIT

SINGLE OUTPUT



DUAL OUTPUT



DMV-6W SERIES, 6WATT, 4:1 INPUT RANGE
NOTES
CAPACITOR SELECTION

INPUT VOLTAGE	C1	SINGLE OUTPUT	C2	DUAL OUTPUT	C2
24VDC	100 μ F	5VDC	1000 μ F	\pm 5VDC	470 μ F
48VDC	47 μ F	9VDC	330 μ F	\pm 9VDC	220 μ F
--	--	12VDC	100 μ F	\pm 12VDC	47 μ F
--	--	15VDC	100 μ F	\pm 15VDC	47 μ F
--	--	24VDC	47 μ F	\pm 24VDC	22 μ F

DMV-6WF SERIES, 6WATT, 4:1 INPUT RANGE
FEATURES:

- ✓ 3000Vdc isolation voltage
- ✓ Metal case with low ripple and noise
- ✓ Short circuit and input under voltage protection
- ✓ Operating temperature range -40°C to +85°C
- ✓ 3 year warranty



Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (mA)	Efficiency Typ.	
DMV6W-2411F	24(9~36)	3.3	1500	78%	
DMV6W-2412F		5	1200	80%	
DMV6W-2416F		9	667	81%	
DMV6W-2413F		12	500	82%	
DMV6W-2414F		15	400	83%	
DMV6W-2415F		24	250	84%	
DMV6W-2421F		±5	±600	80%	
DMV6W-2424F		±9	±333	81%	
DMV6W-2422F		±12	±250	82%	
DMV6W-2423F		±15	±200	82%	
DMV6W-2425F		±24	±125	83%	
DMV6W-4811F		48(18~72)	3.3	1500	78%
DMV6W-4812F			5	1200	80%
DMV6W-4816F			9	667	81%
DMV6W-4813F			12	500	82%
DMV6W-4814F	15		400	82%	
DMV6W-4815F	24		250	83%	
DMV6W-4821F	±5		±600	80%	
DMV6W-4824F	±9		±333	81%	
DMV6W-4822F	±12		±250	82%	
DMV6W-4823F	±15		±200	83%	
DMV6W-4825F	±24		±125	84%	

- Notes: 1. Other input and output models may available on request;
2. Above items are default to metal case.

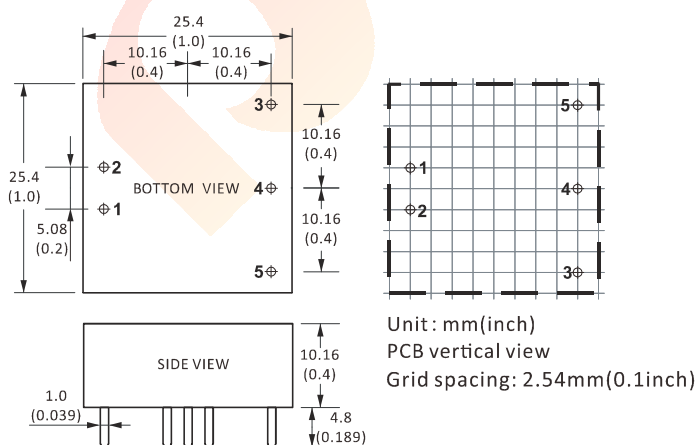
DMV-6WF SERIES, 6WATT, 4:1 INPUT RANGE

ELECTRICAL

Output voltage accuracy (Full voltage, full load)	+Vo -Vo	±2% max. ±3% max.
Line regulation	Nominal Load, full voltage	±0.5% max.
Load regulation	20% ~ 100% full load	±1% max.
Ripple and noise	20MHz BM, full load	100mVp-p max.
Operating frequency	Typical value	300KHz typ.
Isolation voltage (<1mA/min)	Input to output	3000Vdc
Isolation resistance	---	1000mΩ
Temperature coefficient	---	±0.03%/°C max.
Operating temperature range	---	-40°C to +85°C
Storage temperature range	---	-55°C to +125°C
Short circuit protection	---	Continuous, auto-recovery
Relative humidity	---	10%-90% max.
MTBF	Bellcore TR-332, 25°C	1000KHrs
Weight	---	12g

Notes: All the parameters are measured at 25°C ambient temperature, humidity < 75%, nominal input voltage, full load and after warm-up, unless otherwise specified.

MECHANICAL



CONNECTION

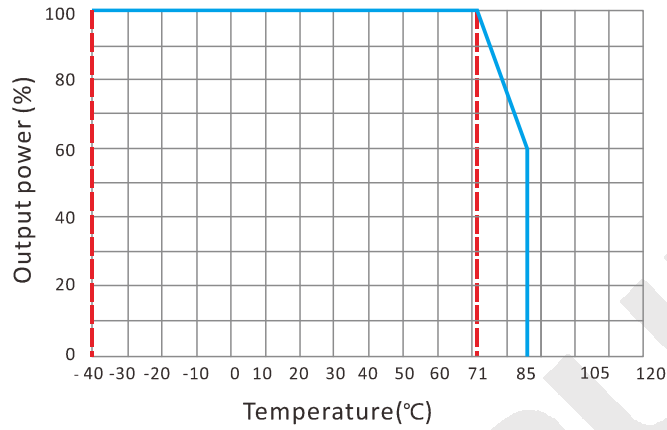
PIN #	SINGLE	DUAL
1	GND	GND
2	+Vin	+Vin
3	+Vo	+Vo1
4	No Pin	0V
5	0V	-Vo2

Note:

* Unit is mm(inch).

DMV-6WF SERIES, 6WATT, 4:1 INPUT RANGE

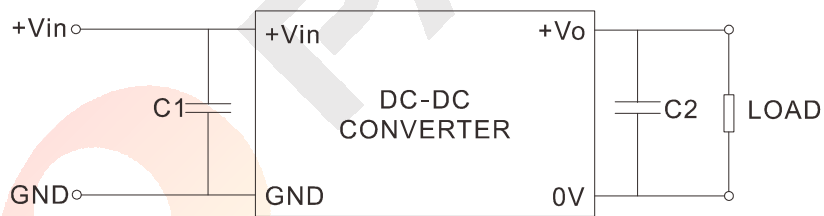
ELECTRICAL CURVE



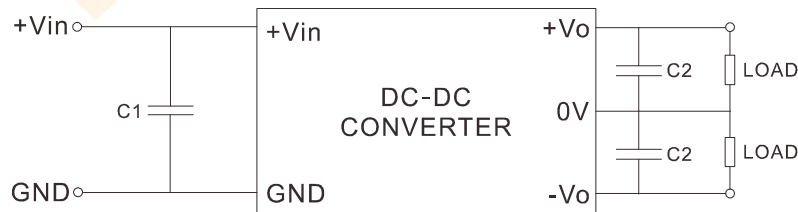
NOTES

RECOMMENDED TEST AND APPLICATION CIRCUIT

SINGLE OUTPUT



DUAL OUTPUT



DMV-6WF SERIES, 6WATT, 4:1 INPUT RANGE
NOTES
CAPACITOR SELECTION

INPUT VOLTAGE	C1	SINGLE OUTPUT	C2	DUAL OUTPUT	C2
24VDC	100 μ F	5VDC	1000 μ F	\pm 5VDC	470 μ F
48VDC	47 μ F	9VDC	330 μ F	\pm 9VDC	220 μ F
--	--	12VDC	100 μ F	\pm 12VDC	47 μ F
--	--	15VDC	100 μ F	\pm 15VDC	47 μ F
--	--	24VDC	47 μ F	\pm 24VDC	22 μ F

DMV-10 SERIES, 10WATT, 2:1 INPUT RANGE

FEATURES:

- ✓ 1500Vdc isolation voltage
- ✓ Six-side shielded metal case with low ripple and noise
- ✓ High reliability, high efficiency
- ✓ Operating temperature range -40°C to +85°C
- ✓ 3 year warranty



Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (mA)	Efficiency Typ.
DMV10-1211	12(9~18)	5	2000	80%
DMV10-1212		9	1111	82%
DMV10-1213		12	833	83%
DMV10-1214		15	667	83%
DMV10-1215		24	417	85%
DMV10-1221		±5	1000	81%
DMV10-1222		±9	555	82%
DMV10-1223		±12	417	83%
DMV10-1224		±15	333	84%
DMV10-1225		±24	208	84%
DMV10-2410	24(18~36)	3.3	3000	78%
DMV10-2411		5	2000	80%
DMV10-2412		9	1111	82%
DMV10-2413		12	833	83%
DMV10-2414		15	667	84%
DMV10-2415		24	417	86%
DMV10-2421		±5	1000	81%
DMV10-2422		±9	555	82%
DMV10-2423		±12	417	83%
DMV10-2424		±15	333	84%
DMV10-2425	±24	208	84%	
DMV10-4811	48(36~72)	5	2000	81%
DMV10-4812		9	1111	82%
DMV10-4813		12	833	84%
DMV10-4814		15	667	84%
DMV10-4815		24	417	86%
DMV10-4821		±5	1000	81%
DMV10-4822		±9	555	82%
DMV10-4823		±12	417	83%
DMV10-4824		±15	333	84%
DMV10-4825		±24	208	84%

DMV-10 SERIES, 10WATT, 2:1 INPUT RANGE

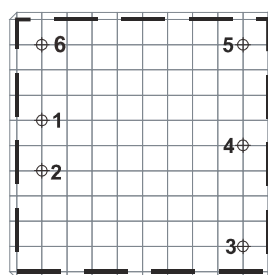
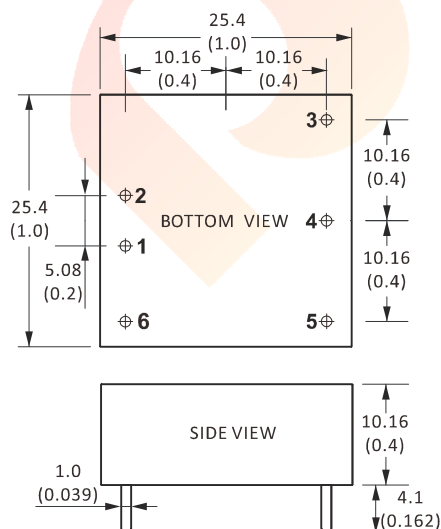
Notes: Other input and output models may available on request.

ELECTRICAL

Output voltage accuracy	---	±2% max.
Line regulation	Nominal Load, full voltage	±0.5% max.
Load regulation	5% ~ 100% rated load	±1% max.
Switching frequency	Rated input voltage	300KHz typ.
Ripple and noise	20MHz BM, full load	120mVp-p max.
Isolation voltage (<1mA/min)	Input to output	1500Vdc
Isolation resistance	500Vdc	1000MΩ
Temperature coefficient	---	±0.03%/°C max.
Operating temperature range	---	-40°C to +85°C
Storage temperature range	---	-55°C to +125°C
Short circuit protection	---	Continuous auto-recovery
Relative humidity	---	5%-95% max.
MTBF	Bellcore TR-332, 25°C	1000KHrs
Weight	---	15g

Notes: All the parameters are measured at 25°C ambient temperature, humidity < 75%, nominal input voltage, full load and after warm-up, unless otherwise specified.

MECHANICAL



Unit: mm(inch)
PCB vertical view
Grid spacing: 2.54mm(0.1inch)

CONNECTION

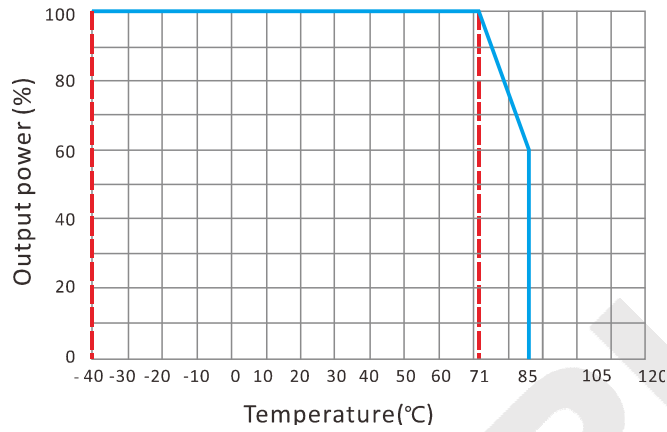
PIN #	SINGLE	DUAL
1	GND	GND
2	+Vin	+Vin
3	+Vo	+Vo
4	No Pin	0V
5	0V	-Vo

Note:

* Unit is mm(inch).

DMV-10 SERIES, 10WATT, 2:1 INPUT RANGE

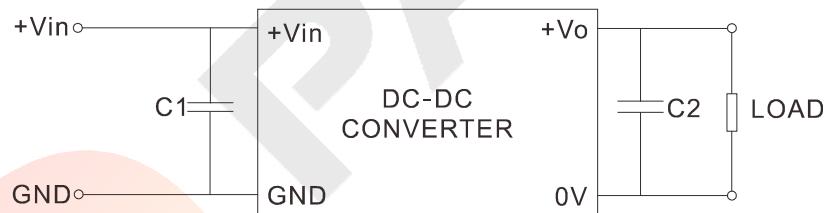
ELECTRICAL CURVE



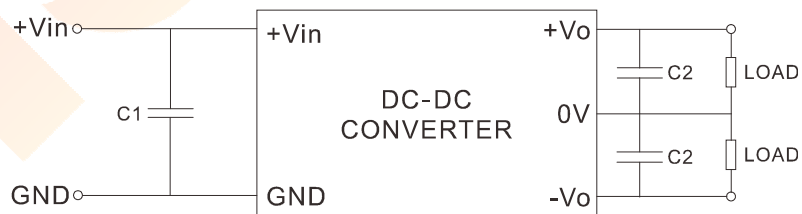
NOTES

RECOMMENDED TEST AND APPLICATION CIRCUIT

SINGLE OUTPUT



DUAL OUTPUT



DMV-10 SERIES, 10WATT, 2:1 INPUT RANGE
NOTES
CAPACITOR SELECTION

INPUT VOLTAGE	C1	SINGLE OUTPUT	C2	DUAL OUTPUT	C2
12VDC	100 μ F	5VDC	1000 μ F	\pm 5VDC	470 μ F
24VDC	47 μ F	9VDC	470 μ F	\pm 9VDC	220 μ F
48VDC	10 μ F	12VDC	220 μ F	\pm 12VDC	100 μ F
--	--	15VDC	220 μ F	\pm 15VDC	100 μ F
--	--	24VDC	100 μ F	\pm 24VDC	47 μ F

DMV-10W SERIES, 10WATT, 4:1 INPUT RANGE
FEATURES:

- ✓ 1500Vdc isolation voltage
- ✓ Six-side shielded metal case with low ripple and noise
- ✓ High reliability, high efficiency
- ✓ Operating temperature range -40°C to +85°C
- ✓ 3 year warranty



Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (mA)	Efficiency Typ.
DMV10W-2411	24(9~36)	5	2000	80%
DMV10W-2412		9	1111	82%
DMV10W-2413		12	833	83%
DMV10W-2414		15	667	83%
DMV10W-2415		24	417	85%
DMV10W-2421		±5	1000	81%
DMV10W-2422		±9	555	82%
DMV10W-2423		±12	417	83%
DMV10W-2424		±15	333	84%
DMV10W-2425		±24	208	84%
DMV10W-4811		48(18~72)	5	2000
DMV10W-4812	9		1111	82%
DMV10W-4813	12		833	83%
DMV10W-4814	15		667	83%
DMV10W-4815	24		417	84%
DMV10W-4821	±5		1000	81%
DMV10W-4822	±9		555	82%
DMV10W-4823	±12		417	83%
DMV10W-4824	±15		333	84%
DMV10W-4825	±24		208	84%

Notes:

1. Other input and output models may available on request;
2. Add suffix "C" for CTRL pin function.

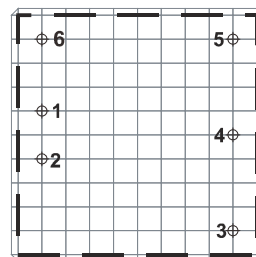
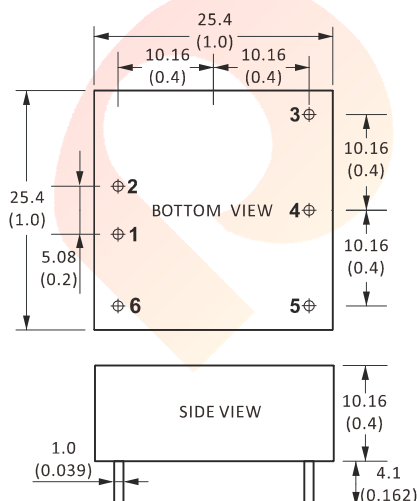
ELECTRICAL

Output voltage accuracy	---	±2% max.
Line regulation	Nominal Load, full voltage	±0.5% max.
Load regulation	5% ~ 100% rated load	±1% max.
Switching frequency	Rated input voltage	300KHz typ.
Ripple and noise	20MHz BM, full load	100mVp-p max.

DMV-10W SERIES, 10WATT, 4:1 INPUT RANGE
ELECTRICAL

Isolation voltage (<1mA/min)	Input to output	1500Vdc
Isolation resistance	500Vdc	1000MΩ
Temperature coefficient	---	±0.03%/°C max.
Operating temperature range	---	-40°C to +85°C
Storage temperature range	---	-55°C to +125°C
Short circuit protection	---	Continuous auto-recovery
CTRL*	Turn on	Hang or connect high level(2.5-50Vdc)
	Turn off	Connect -Vin or low level(0-1.0Vdc)
	Shut off input current	10mA typ.
Relative humidity	---	5%-95% max.
MTBF	Bellcore TR-332, 25°C	1000KHrs
Weight	---	15g

Notes: All the parameters are measured at 25°C ambient temperature, humidity < 75%, nominal input voltage, full load and after warm-up, unless otherwise specified.

MECHANICAL


Unit : mm(inch)
PCB vertical view
Grid spacing: 2.54mm(0.1inch)

CONNECTION

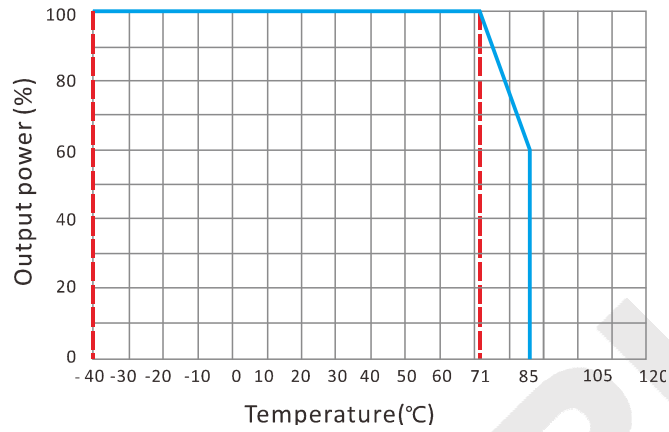
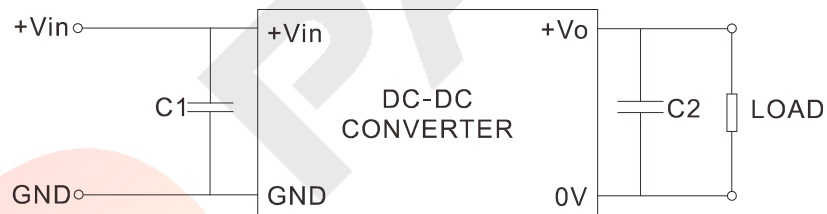
PIN #	SINGLE	DUAL
1	GND	GND
2	+Vin	+Vin
3	+Vo	+Vo
4	No Pin	0V
5	0V	-Vo

CONNECTION - "CTRL"

1	-Vin	-Vin
2	+Vin	+Vin
3	+Vo	+Vo
4	No Pin	0V
5	GND	-Vo
6	CTRL	CTRL

Note:

* Unit is mm(inch).

DMV-10W SERIES, 10WATT, 4:1 INPUT RANGE
ELECTRICAL CURVE

NOTES
RECOMMENDED TEST AND APPLICATION CIRCUIT
SINGLE OUTPUT

DUAL OUTPUT


DMV-10W SERIES, 10WATT, 4:1 INPUT RANGE
NOTES
CAPACITOR SELECTION

INPUT VOLTAGE	C1	SINGLE OUTPUT	C2	DUAL OUTPUT	C2
24VDC	47 μ F	5VDC	470 μ F	\pm 5VDC	220 μ F
48VDC	10 μ F	9VDC	220 μ F	\pm 9VDC	100 μ F
--	--	12VDC	100 μ F	\pm 12VDC	47 μ F
--	--	15VDC	100 μ F	\pm 15VDC	47 μ F
--	--	24VDC	47 μ F	\pm 24VDC	22 μ F

DMV-12W SERIES, 12WATT, 4:1 INPUT RANGE

FEATURES:

- ✓ 1500Vdc isolation voltage
- ✓ Six-side shielded metal case with low ripple and noise
- ✓ High reliability, high efficiency
- ✓ Operating temperature range -40°C to +85°C
- ✓ 3 year warranty



Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (mA)	Efficiency Typ.
DMV12W-2411	24(9~36)	5	2400	81%
DMV12W-2412		9	1333	84%
DMV12W-2413		12	1000	84%
DMV12W-2414		15	800	85%
DMV12W-2415		24	500	86%
DMV12W-4811	48(18~72)	5	2400	81%
DMV12W-4812		9	1333	84%
DMV12W-4813		12	1000	84%
DMV12W-4814		15	800	85%
DMV12W-4815		24	500	86%

Notes:

1. Other input and output models may available on request;
2. Add suffix "C" for CTRL pin function.

ELECTRICAL

Output voltage accuracy	---	±2% max.
Line regulation	Nominal Load, full voltage	±0.5% max.
Load regulation	5% ~ 100% rated load	±1% max.
Switching frequency	Rated input voltage	250KHz typ.
Ripple and noise	20MHz BM, full load	≤15% load, 5%Vo mVp-p typ. ≥15% load, 100mVp-p
Isolation voltage	Input to output	1500Vdc≤0.5mA / 1min
Operating temperature range	---	-40°C to +85°C
Storage temperature range	---	-55°C to +125°C
Short circuit protection	---	Continuous auto-recovery
Output over voltage protection	---	120%~200%Vo
Output over load protection	---	110%~220%Io

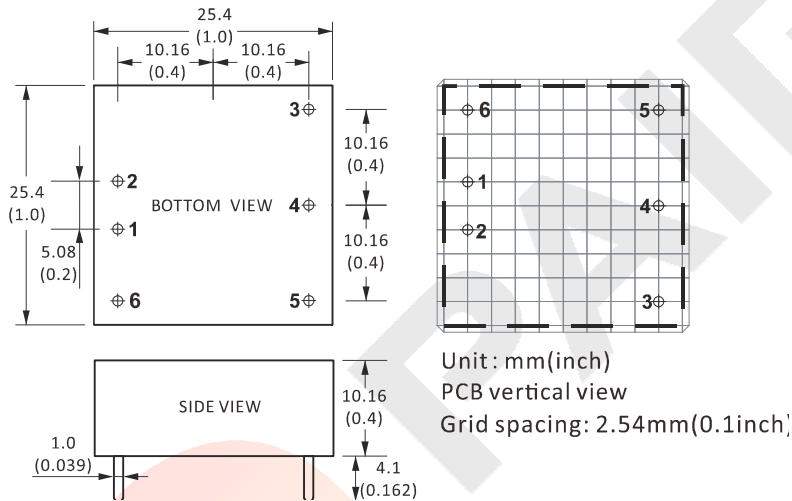
DMV-12W SERIES, 12WATT, 4:1 INPUT RANGE

ELECTRICAL

Relative humidity	---	5%-95% max.
MTBF	Bellcore TR-332, 25°C	20000KHrs
Weight	---	18g

Notes: All the parameters are measured at 25°C ambient temperature, humidity < 75%, nominal input voltage, full load and after warm-up, unless otherwise specified.

MECHANICAL



CONNECTION

PIN #	SINGLE
1	-Vin
2	+Vin
3	+Vo
4	No Pin
5	GND

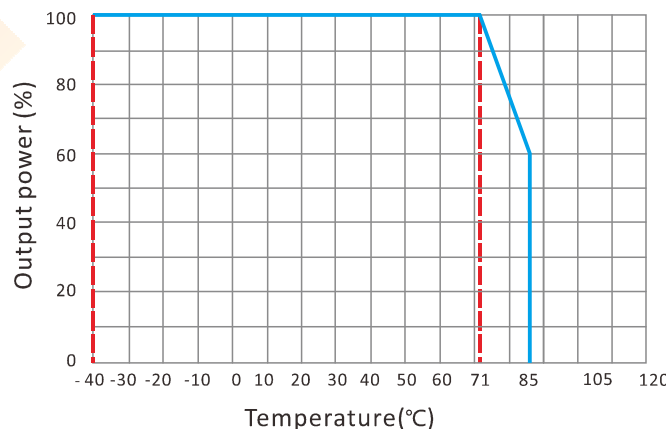
CONNECTION - "CTRL"

1	-Vin
2	+Vin
3	+Vo
4	No Pin
5	GND
6	CTRL

Note:

* Unit is mm(inch).

ELECTRICAL CURVE

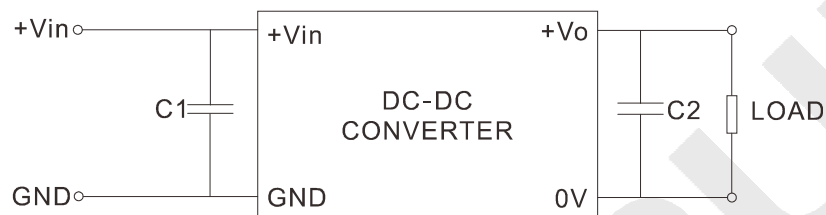


DMV-12W SERIES, 12WATT, 4:1 INPUT RANGE

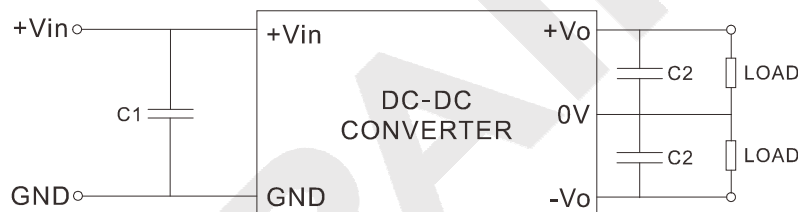
NOTES

RECOMMENDED TEST AND APPLICATION CIRCUIT

SINGLE OUTPUT



DUAL OUTPUT



CAPACITOR SELECTION

INPUT VOLTAGE	C1	SINGLE OUTPUT	C2	DUAL OUTPUT	C2
24VDC	47 μ F	5VDC	470 μ F	\pm 5VDC	220 μ F
48VDC	10 μ F	9VDC	220 μ F	\pm 9VDC	100 μ F
--	--	12VDC	100 μ F	\pm 12VDC	47 μ F
--	--	15VDC	100 μ F	\pm 15VDC	47 μ F
--	--	24VDC	47 μ F	\pm 24VDC	22 μ F

DMV-15 SERIES, 15WATT, 2:1 INPUT RANGE

FEATURES:

- ✓ 2 year warranty
- ✓ Six-side shielded metal case
- ✓ Low ripple and noise
- ✓ Over current and short circuit protection
- ✓ Remote on/off
- ✓ Adjustable output voltage



Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (mA)	Efficiency Typ.
DMV15-1211	12(9~18)	5	3000	80%
DMV15-1212		9	1660	85%
DMV15-1213		12	1250	85%
DMV15-1214		15	1000	85%
DMV15-1215		24	625	85%
DMV15-1216		48	310	85%
DMV15-1221		±5	±1500	80%
DMV15-1222		±9	±830	85%
DMV15-1223		±12	±625	85%
DMV15-1224		±15	±500	85%
DMV15-1225		±24	±310	85%
DMV15-2411		24(18~36)	5	3000
DMV15-2412	9		1660	85%
DMV15-2413	12		1250	85%
DMV15-2414	15		1000	85%
DMV15-2415	24		625	85%
DMV15-2416	48		310	85%
DMV15-2421	±5		±1500	80%
DMV15-2422	±9		±830	85%
DMV15-2423	±12		±625	85%
DMV15-2424	±15		±500	85%
DMV15-2425	±24		±310	85%
DMV15-4811	48(36~72)		5	3000
DMV15-4812		9	1660	85%
DMV15-4813		12	1250	85%
DMV15-4814		15	1000	85%
DMV15-4815		24	625	85%
DMV15-4816		48	310	85%
DMV15-4821		±5	±1500	80%

DMV-15 SERIES, 15WATT, 2:1 INPUT RANGE

Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (mA)	Efficiency Typ.
DMV15-4822	48(36~72)	±9	±830	85%
DMV15-4823		±12	±625	85%
DMV15-4824		±15	±500	85%
DMV15-4825		±24	±310	85%
DMV15-11011	110(72~144)	5	3000	80%
DMV15-11012		9	1660	85%
DMV15-11013		12	1250	85%
DMV15-11014		15	1000	85%
DMV15-11015		24	625	85%
DMV15-11016		48	310	85%
DMV15-11021		±5	±1500	80%
DMV15-11022		±9	±830	85%
DMV15-11023		±12	±625	85%
DMV15-11024		±15	±500	85%
DMV15-11025		±24	±310	85%

Notes:

1. Other input and output models may available on request;
2. Above models are default to metal case.

ELECTRICAL

Input voltage range	12V	9-18Vdc
	24V	18-36Vdc
	48V	36-72Vdc
	110V	72-144Vdc
Remote control (Low level remote)	High level or vacant Low level or connect ground	Turn on Turn off
Output voltage accuracy	---	Vo1, Vo2: ±1%, ±3%
Output voltage adjustable	---	±10%
Line regulation	Nominal Load, full voltage	Vo1, Vo2: ±0.2%, ±1.5%
Load regulation	20% ~ 100% rated load	Vo1, Vo2: ±0.5%, ±4%
Dynamic response (transient/recovery time)	5%-50%-75% load capability	$\Delta V_{o1}/\Delta t$: ±4.0%/500 μ s
Ripple and noise	20MHz BM, full load	Vo≤5.0V, ≤50mVp-p
		Vo≥48V, ≤180mVp-p
		Other, ≤100mVp-p
Isolation voltage (<2mA/min)	Input to output	1500Vdc
	Input to case	500Vdc

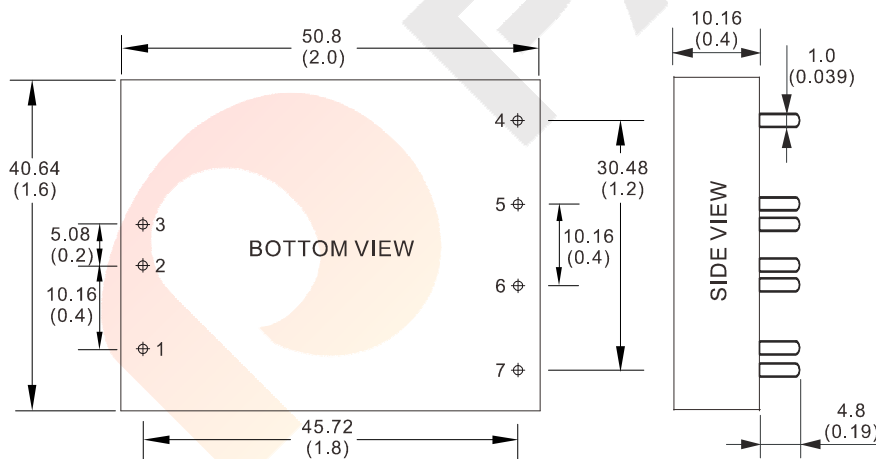
DMV-15 SERIES, 15WATT, 2:1 INPUT RANGE

ELECTRICAL

Switching frequency	300KHz	330KHz max.
Turn-on delay time	---	≤200ms
Operating temperature range	Free air	-25°C to +55°C
Storage temperature range	---	-45°C to +105°C
Input under voltage protection	When input voltage is lower than the low input voltage	Auto-recovery
Over current protection	---	Auto-recovery
Short circuit protection	---	Continuous auto-recovery
Cooling method	---	Cooling by air convection
Relative humidity	---	10%-90% max.
Weight	---	35.7g
MTBF	Bellcore TR-332, 25°C	2x10 ⁵ Hrs

Notes: Unless otherwise specified, all the parameters of the test conditions are as follows: ambient temperature 25°C, the nominal input voltage, pure resistive nominal load.

MECHANICAL



CONNECTION

PIN #	SINGLE	DUAL
1	REM	REM
2	-Vin	-Vin
3	+Vin	+Vin
4	No pin	+Vo1
5	+Vo	COM
6	GND	-Vo2
7	TRIM	TRIM

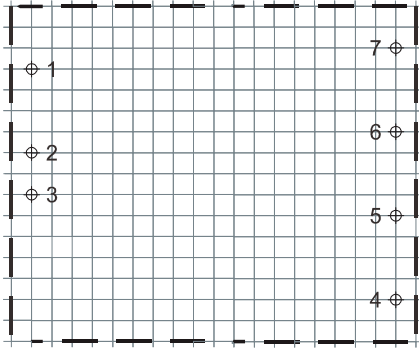
Note:

* Unit is mm(inch).

DMV-15 SERIES, 15WATT, 2:1 INPUT RANGE

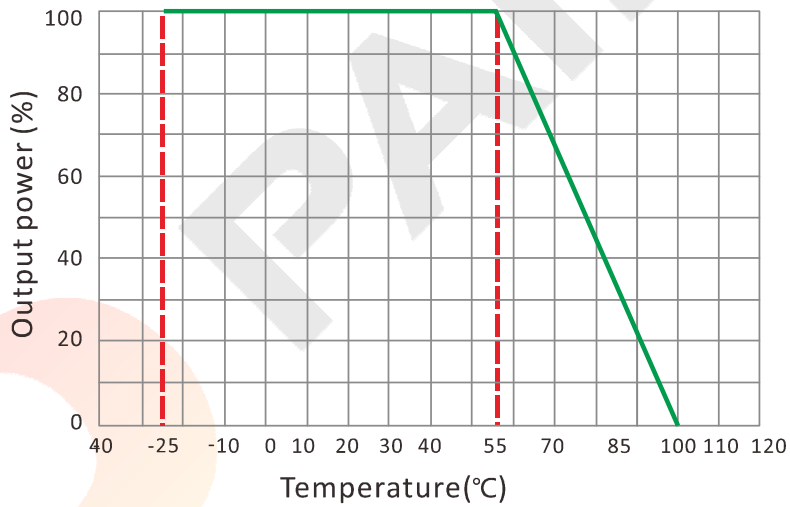
MECHANICAL

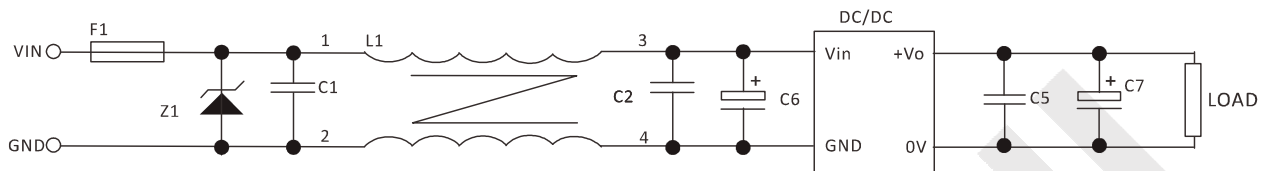
LAYOUT



Unit: mm(inch)
PCB vertical view
Grid spacing: 2.54mm(0.1inch)

ELECTRICAL CURVE



DMV-15 SERIES, 15WATT, 2:1 INPUT RANGE
NOTES
RECOMMENDED TEST AND APPLICATION CIRCUIT


1. TVS&FUSE be helpful with over voltage protection and inrush limiting. Recommended FUSE better be 1.5~2times of the rated current .
2. The input filter capacitor C6 could select the aluminum electrolytic capacitors or tantalum capacitors, and the withstand voltage should be greater than the highest input voltage. Recommended capacitor should be between 22 μ F~100 μ F.
3. C1,C2 for the input filter capacitor,0.1~1 μ F high-frequency ceramics capacitor or chip capacitor are recommended. The withstand voltage of output filter C5, C7 should be greater than the highest output voltage. Recommended capacitor of C7 better within 100 μ F and C5 connected with the chip to reduce the input voltage peak, recommended 0.1~1 μ F high-frequency ceramics capacitor or chip capacitor.

DMV-15W SERIES, 15WATT, 4:1 INPUT RANGE

FEATURES:

- ✓ 2 year warranty
- ✓ Six-side shielded metal case
- ✓ Low ripple and noise
- ✓ Over current and short circuit protection
- ✓ Remote on/off
- ✓ Adjustable output voltage



Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (mA)	Efficiency Typ.
DMV15W-2411	24(9~36)	5	3000	80%
DMV15W-2412		9	1600	85%
DMV15W-2413		12	1250	85%
DMV15W-2414		15	1000	85%
DMV15W-2415		24	625	85%
DMV15W-2416		48	310	85%
DMV15W-2421		±5	±1500	80%
DMV15W-2422		±9	±830	85%
DMV15W-2423		±12	±625	85%
DMV15W-2424		±15	±500	85%
DMV15W-2425		±24	±310	85%
DMV15W-4811		48(18~72)	5	3000
DMV15W-4812	9		1600	85%
DMV15W-4813	12		1250	85%
DMV15W-4814	15		1000	85%
DMV15W-4815	24		625	85%
DMV15W-4816	48		310	85%
DMV15W-4821	±5		±1500	80%
DMV15W-4822	±9		±830	85%
DMV15W-4823	±12		±625	85%
DMV15W-4824	±15		±500	85%
DMV15W-4825	±24		±310	85%

Notes:

1. Other input and output models may available on request;
2. Above models are default to metal case.

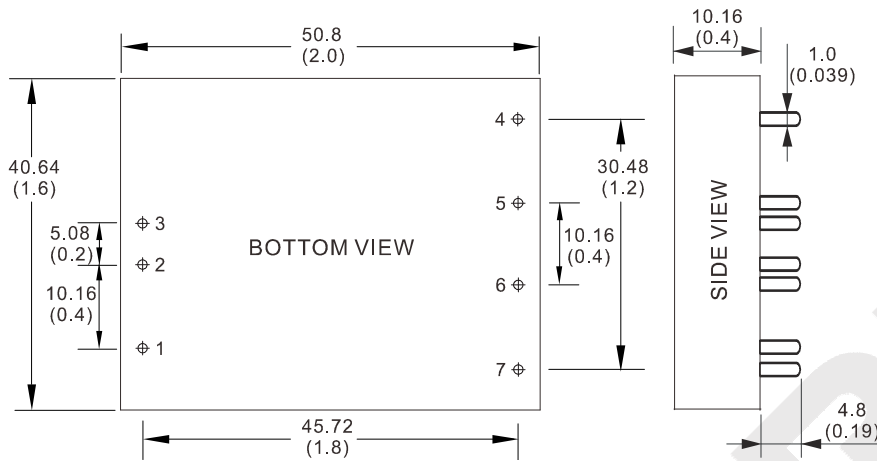
DMV-15W SERIES, 15WATT, 4:1 INPUT RANGE
ELECTRICAL

Input voltage range	18V	9-36Vdc
	36V	18-72Vdc
Remote control	High level or vacant	Turn on
(Low level remote)	Low level or connect ground	Turn off
Output voltage accuracy	---	Vo1, Vo2: $\pm 1\%$, $\pm 3\%$
Output voltage adjustable	---	$\pm 10\%$
Line regulation	Nominal Load, full voltage	Vo1, Vo2: $\pm 0.2\%$, $\pm 1.5\%$
Load regulation	20% ~ 100% rated load	Vo1, Vo2: $\pm 0.5\%$, $\pm 4\%$
Dynamic response (transient/recovery time)	5%-50%-75% load capability	$\Delta V_{o1}/\Delta t$: $\pm 4.0\%/500\mu s$
Ripple and noise	20MHz BM, full load	Vo \leq 5.0V, $\leq 50mVp-p$
		Vo \geq 48V, $\leq 180mVp-p$
		Other, $\leq 100mVp-p$
Isolation voltage ($< 2mA/min$)	Input to output	1500Vdc
	Input to case	500Vdc
Switching frequency	300KHz	330KHz max.
Turn-on delay time	---	$\leq 200ms$
Operating temperature range	Free air	-25°C to +55°C
Storage temperature range	---	-45°C to +105°C
Input under voltage protection	When input voltage is lower than the low input voltage	Auto-recovery
Over current protection	---	Auto-recovery
Short circuit protection	---	Continuous auto-recovery
Cooling method	---	Cooling by air convection
Relative humidity	---	10%-90% max.
Weight	---	35.7g
MTBF	Bellcore TR-332, 25°C	2x10 ⁵ Hrs

Notes: Unless otherwise specified, all the parameters of the test conditions are as follows: ambient temperature 25°C, the nominal input voltage, pure resistive nominal load.

DMV-15W SERIES, 15WATT, 4:1 INPUT RANGE

MECHANICAL



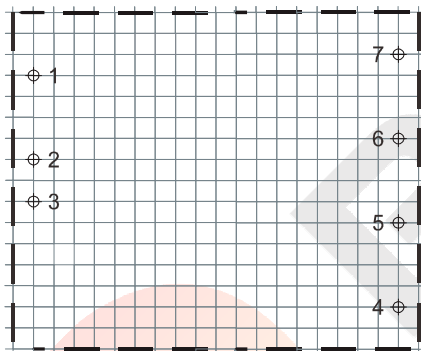
CONNECTION

PIN #	SINGLE	DUAL
1	REM	REM
2	-Vin	-Vin
3	+Vin	+Vin
4	No pin	+Vo1
5	+Vo	COM
6	GND	-Vo2
7	TRIM	TRIM

Note:

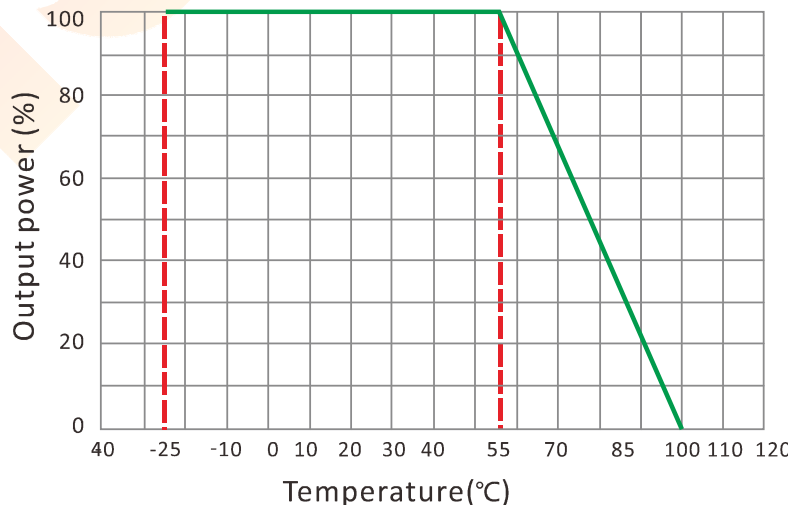
* Unit is mm(inch).

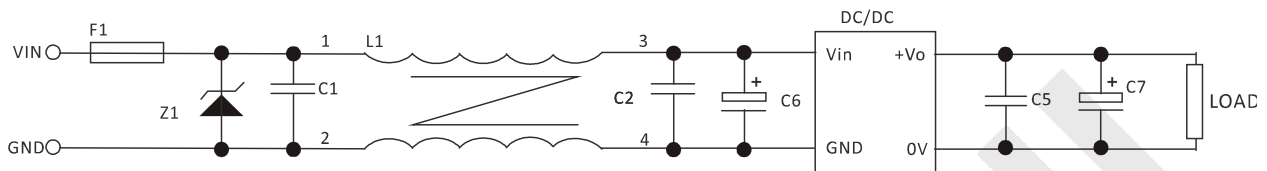
LAYOUT



Unit: mm(inch)
PCB vertical view
Grid spacing: 2.54mm(0.1inch)

ELECTRICAL CURVE



DMV-15W SERIES, 15WATT, 4:1 INPUT RANGE
NOTES
RECOMMENDED TEST AND APPLICATION CIRCUIT


1. TVS&FUSE be helpful with over voltage protection and inrush limiting. Recommended FUSE better be 1.5~2times of the rated current .
2. The input filter capacitor C6 could select the aluminum electrolytic capacitors or tantalum capacitors, and the withstand voltage should be greater than the highest input voltage. Recommended capacitor should be between 22 μ F~100 μ F.
3. C1,C2 for the input filter capacitor,0.1~1 μ F high-frequency ceramics capacitor or chip capacitor are recommended. The withstand voltage of output filter C5, C7 should be greater than the highest output voltage. Recommended capacitor of C7 better within 100 μ F and C5 connected with the chip to reduce the input voltage peak, recommended 0.1~1 μ F high-frequency ceramics capacitor or chip capacitor.

DMV-15W1 SERIES, 15WATT, 4:1 INPUT RANGE
FEATURES:

- ✓ 1500Vdc isolation voltage
- ✓ Six-side shielded metal case with low ripple and noise
- ✓ High reliability, high efficiency
- ✓ Operating temperature range -40°C to +85°C
- ✓ 3 year warranty



Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (mA)	Efficiency Typ.
DMV15W1-2411	24(9~36)	5	3000	90%
DMV15W1-2412		9	1667	90%
DMV15W1-2413		12	1250	90%
DMV15W1-2414		15	1000	90%
DMV15W1-2415		24	625	90%
DMV15W1-4811	48(18~72)	5	3000	90%
DMV15W1-4812		9	1667	90%
DMV15W1-4813		12	1250	90%
DMV15W1-4814		15	1000	90%
DMV15W1-4815		24	625	90%

Notes:

1. Other input and output models may available on request;
2. Add suffix "C" for CTRL pin function.

ELECTRICAL

Output voltage accuracy	---	±2% max.
Line regulation	Nominal Load, full voltage	±0.5% max.
Load regulation	5% ~ 100% rated load	±1% max.
Switching frequency	Rated input voltage	350KHz typ.
Ripple and noise	20MHz BM, full load	≤15% load, 5%Vo mVp-p typ. ≥15% load, 100mVp-p
Isolation voltage	Input to output	1500Vdc≤0.5mA / 1min
Operating temperature range	---	-40°C to +85°C
Storage temperature range	---	-55°C to +125°C
Short circuit protection	---	Continuous auto-recovery
Output over voltage protection	---	120%~200%Vo
Output over load protection	---	110%~220%Io

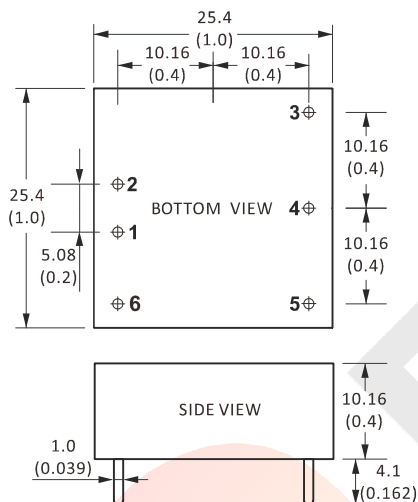
DMV-15W1 SERIES, 15WATT, 4:1 INPUT RANGE

ELECTRICAL

Relative humidity	---	5%-95% max.
MTBF	Bellcore TR-332, 25°C	20000KHrs
Weight	---	18g

Notes: All the parameters are measured at 25°C ambient temperature, humidity < 75%, nominal input voltage, full load and after warm-up, unless otherwise specified.

MECHANICAL



CONNECTION

PIN #	SINGLE
1	-Vin
2	+Vin
3	+Vo
4	No Pin
5	GND

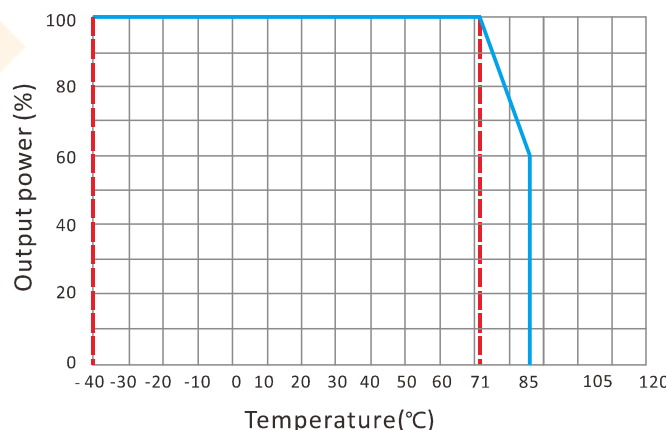
CONNECTION - "CTRL"

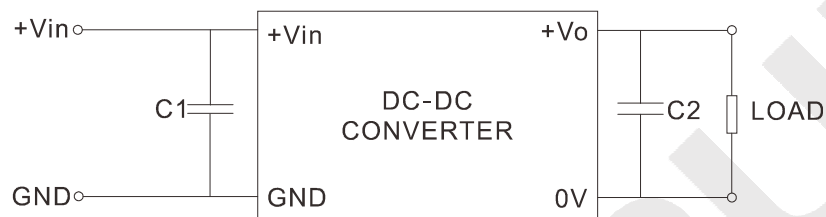
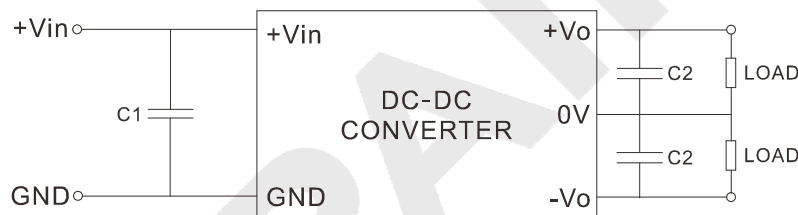
1	-Vin
2	+Vin
3	+Vo
4	No Pin
5	GND
6	CTRL

Note:

* Unit is mm(inch).

ELECTRICAL CURVE



DMV-15W1 SERIES, 15WATT, 4:1 INPUT RANGE
NOTES
RECOMMENDED TEST AND APPLICATION CIRCUIT
SINGLE OUTPUT

DUAL OUTPUT

CAPACITOR SELECTION

INPUT VOLTAGE	C1	SINGLE OUTPUT	C2	DUAL OUTPUT	C2
24VDC	47 μ F	5VDC	470 μ F	\pm 5VDC	220 μ F
48VDC	10 μ F	9VDC	220 μ F	\pm 9VDC	100 μ F
--	--	12VDC	100 μ F	\pm 12VDC	47 μ F
--	--	15VDC	100 μ F	\pm 15VDC	47 μ F
--	--	24VDC	47 μ F	\pm 24VDC	22 μ F

DMV-20 SERIES, 20WATT, 2:1 INPUT RANGE

FEATURES:

- ✓ 2 year warranty
- ✓ Six-side shielded metal case
- ✓ Low ripple and noise
- ✓ Over current and short circuit protection
- ✓ Remote on/off
- ✓ Adjustable output voltage



Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (mA)	Efficiency Typ.
DMV20-1211	12(9~18)	5	4000	80%
DMV20-1212		9	2220	85%
DMV20-1213		12	1660	85%
DMV20-1214		15	1330	85%
DMV20-1215		24	830	85%
DMV20-1216		48	410	85%
DMV20-1221		±5	±2000	80%
DMV20-1222		±9	±1110	85%
DMV20-1223		±12	±830	85%
DMV20-1224		±15	±660	85%
DMV20-1225		±24	±410	85%
DMV20-2417	24(18~36)	3.3	4000	75%
DMV20-2411		5	4000	80%
DMV20-2412		9	2220	85%
DMV20-2413		12	1660	85%
DMV20-2414		15	1330	85%
DMV20-2415		24	830	85%
DMV20-2416		48	410	85%
DMV20-2421		±5	±2000	80%
DMV20-2422		±9	±1110	85%
DMV20-2423		±12	±830	85%
DMV20-2424		±15	±660	85%
DMV20-2425	±24	±410	85%	
DMV20-4811	48(36~72)	5	4000	80%
DMV20-4812		9	2220	85%
DMV20-4813		12	1660	85%
DMV20-4814		15	1330	85%
DMV20-4815		24	830	85%
DMV20-4816		48	410	85%

DMV-20 SERIES, 20WATT, 2:1 INPUT RANGE

Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (mA)	Efficiency Typ.
DMV20-4821	48(36~72)	±5	±2000	80%
DMV20-4822		±9	±1110	85%
DMV20-4823		±12	±830	85%
DMV20-4824		±15	±660	85%
DMV20-4825		±24	±410	85%
DMV20-11011	110(72~144)	5	4000	80%
DMV20-11012		9	2220	85%
DMV20-11013		12	1660	85%
DMV20-11014		15	1330	85%
DMV20-11015		24	830	85%
DMV20-11016		48	410	85%
DMV20-11021		±5	±2000	80%
DMV20-11022		±9	±1110	85%
DMV20-11023		±12	±830	85%
DMV20-11024		±15	±660	85%
DMV20-11025		±24	±410	85%

Notes:

1. Other input and output models may available on request;
2. Above models are default to metal case.

ELECTRICAL

Input voltage range	12V	9-18Vdc
	24V	18-36Vdc
	48V	36-72Vdc
	110V	72-144Vdc
Remote control (Low level remote)	High level or vacant	Turn on
	Low level or connect ground	Turn off
Output voltage accuracy	---	Vo1, Vo2: ±1%, ±3%
Output voltage adjustable	Trim pin	±10%
Line regulation	Nominal Load, full voltage	Vo1, Vo2: ±0.2%, ±1.5%
Load regulation	20% ~ 100% rated load	Vo1, Vo2: ±0.5%, ±4%
Dynamic response (transient/recovery time)	5%-50%-75% load capability	$\Delta V_{o1}/\Delta t$: ±4.0%/500 μ s
Ripple and noise	20MHz BM, full load	Vo≤5.0V, ≤50mVp-p
		Vo≥48V, ≤180mVp-p
		Other, ≤100mVp-p

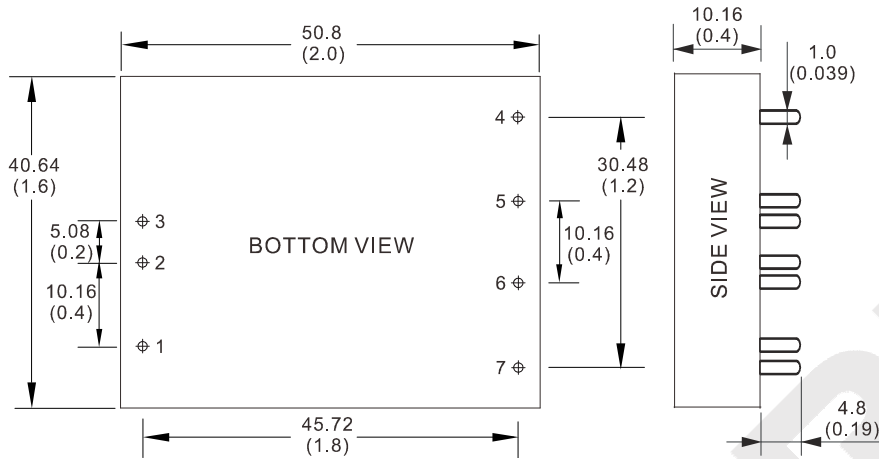
DMV-20 SERIES, 20WATT, 2:1 INPUT RANGE
ELECTRICAL

Isolation voltage (<2mA/min)	Input to output	1500Vdc
	Input to case	500Vdc
Switching frequency	300KHz	330KHz max.
Turn-on delay time	---	≤200ms
Operating temperature range	Free air	-25°C to +55°C
Storage temperature range	---	-45°C to +105°C
Input under voltage protection	When input voltage is lower than the low input voltage	Auto-recovery
Over current protection	---	Auto-recovery
Short circuit protection	---	Continuous auto-recovery
Cooling method	---	Cooling by air convection
Relative humidity	---	10%-90% max.
Weight	---	35.7g
MTBF	Bellcore TR-332, 25°C	2x10 ⁵ Hrs

Notes: Unless otherwise specified, all the parameters of the test conditions are as follows: ambient temperature 25°C, the nominal input voltage, pure resistive nominal load.

DMV-20 SERIES, 20WATT, 2:1 INPUT RANGE

MECHANICAL



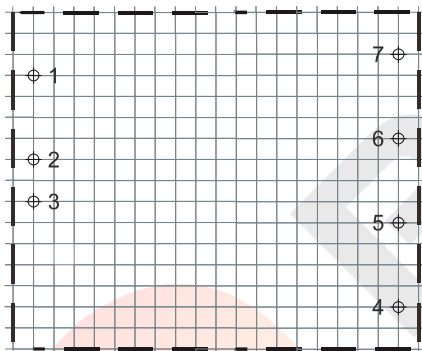
CONNECTION

PIN #	SINGLE	DUAL
1	REM	REM
2	-Vin	-Vin
3	+Vin	+Vin
4	No pin	+Vo1
5	+Vo	COM
6	GND	-Vo2
7	TRIM	TRIM

Note:

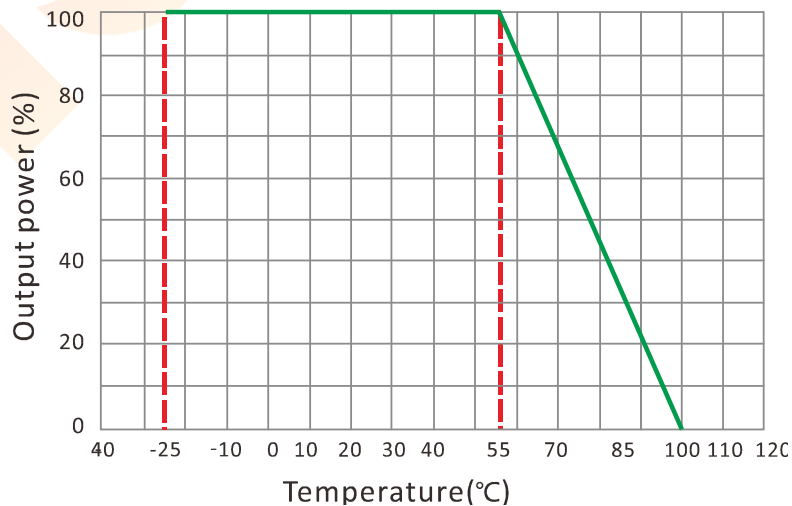
* Unit is mm(inch).

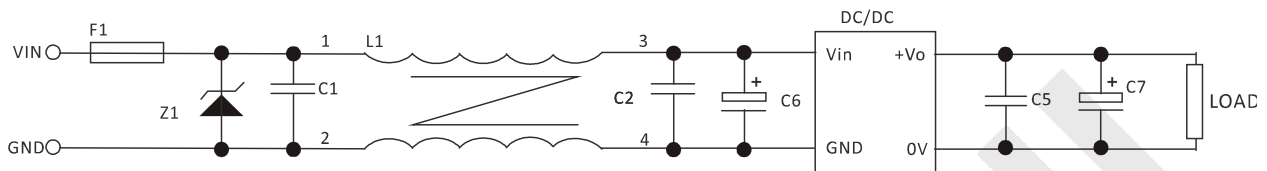
LAYOUT



Unit: mm(inch)
PCB vertical view
Grid spacing: 2.54mm(0.1inch)

ELECTRICAL CURVE



DMV-20 SERIES, 20WATT, 2:1 INPUT RANGE
NOTES
RECOMMENDED TEST AND APPLICATION CIRCUIT


1. TVS&FUSE be helpful with over voltage protection and inrush limiting. Recommended FUSE better be 1.5~2times of the rated current .
2. The input filter capacitor C6 could select the aluminum electrolytic capacitors or tantalum capacitors, and the withstand voltage should be greater than the highest input voltage. Recommended capacitor should be between 22 μ F~100 μ F.
3. C1,C2 for the input filter capacitor,0.1~1 μ F high-frequency ceramics capacitor or chip capacitor are recommended. The withstand voltage of output filter C5, C7 should be greater than the highest output voltage. Recommended capacitor of C7 better within 100 μ F and C5 connected with the chip to reduce the input voltage peak, recommended 0.1~1 μ F high-frequency ceramics capacitor or chip capacitor.

DMV-20W1 SERIES, 20WATT, 4:1 INPUT RANGE
FEATURES:

- ✓ 1500Vdc isolation voltage
- ✓ Six-side shielded metal case with low ripple and noise
- ✓ High reliability, high efficiency
- ✓ Operating temperature range -40°C to +85°C
- ✓ 3 year warranty



Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (mA)	Efficiency Typ.
DMV20W1-2411	24(9~36)	5	4000	90%
DMV20W1-2412		9	2222	90%
DMV20W1-2413		12	1667	90%
DMV20W1-2414		15	1333	90%
DMV20W1-2415		24	833	90%
DMV20W1-4811	48(18~72)	5	4000	90%
DMV20W1-4812		9	2222	90%
DMV20W1-4813		12	1667	90%
DMV20W1-4814		15	1333	90%
DMV20W1-4815		24	833	90%

Notes:

1. Other input and output models may available on request;
2. Add suffix "C" for CTRL pin function.

ELECTRICAL

Output voltage accuracy	---	±2% max.
Line regulation	Nominal Load, full voltage	±0.5% max.
Load regulation	5% ~ 100% rated load	±1% max.
Switching frequency	Rated input voltage	350KHz typ.
Ripple and noise	20MHz BM, full load	≤15% load, 5%Vo mVp-p typ. ≥15% load, 100mVp-p
Isolation voltage	Input to output	1500Vdc≤0.5mA / 1min
Operating temperature range	---	-40°C to +85°C
Storage temperature range	---	-55°C to +125°C
Short circuit protection	---	Continuous auto-recovery
Output over voltage protection	---	120%~200%Vo
Output over load protection	---	110%~220%Io

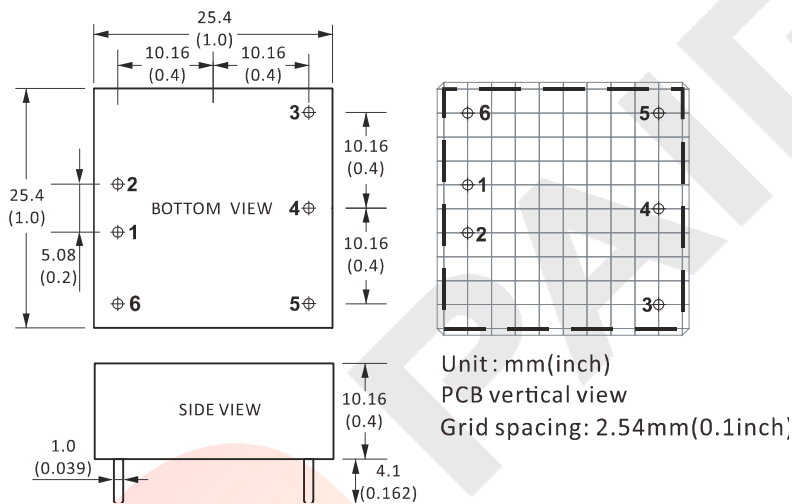
DMV-20W1 SERIES, 20WATT, 4:1 INPUT RANGE

ELECTRICAL

Relative humidity	---	5%-95% max.
MTBF	Bellcore TR-332, 25°C	20000KHrs
Weight	---	18g

Notes: All the parameters are measured at 25°C ambient temperature, humidity < 75%, nominal input voltage, full load and after warm-up, unless otherwise specified.

MECHANICAL



CONNECTION

PIN #	SINGLE
1	-Vin
2	+Vin
3	+Vo
4	No Pin
5	GND

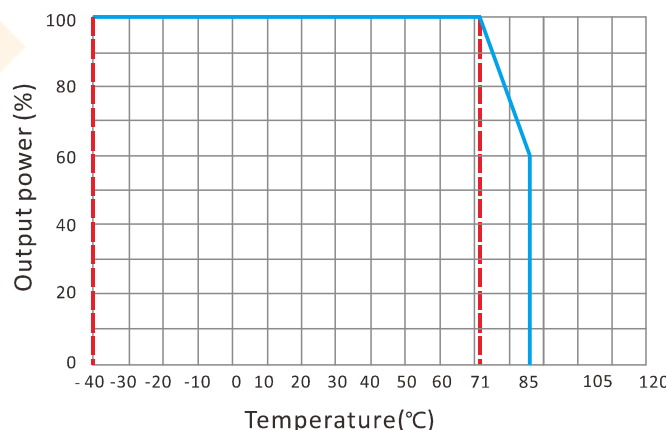
CONNECTION - "CTRL"

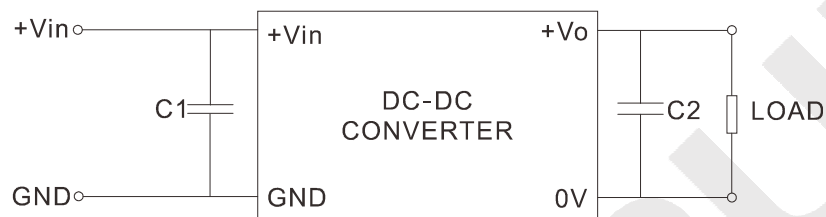
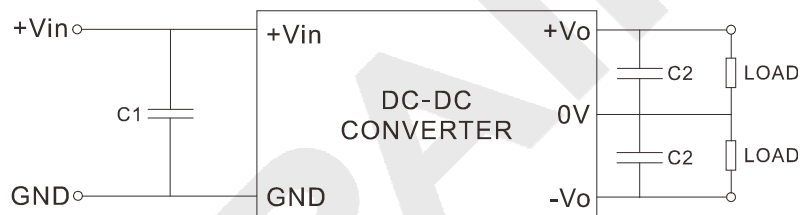
1	-Vin
2	+Vin
3	+Vo
4	No Pin
5	GND
6	CTRL

Note:

* Unit is mm(inch).

ELECTRICAL CURVE



DMV-20W1 SERIES, 20WATT, 4:1 INPUT RANGE
NOTES
RECOMMENDED TEST AND APPLICATION CIRCUIT
SINGLE OUTPUT

DUAL OUTPUT

CAPACITOR SELECTION

INPUT VOLTAGE	C1	SINGLE OUTPUT	C2	DUAL OUTPUT	C2
24VDC	47 μ F	5VDC	470 μ F	\pm 5VDC	220 μ F
48VDC	10 μ F	9VDC	220 μ F	\pm 9VDC	100 μ F
--	--	12VDC	100 μ F	\pm 12VDC	47 μ F
--	--	15VDC	100 μ F	\pm 15VDC	47 μ F
--	--	24VDC	47 μ F	\pm 24VDC	22 μ F

DMV-25 SERIES, 25WATT, 2:1 INPUT RANGE
FEATURES:

- ✓ 2 year warranty
- ✓ Six-side shielded metal case
- ✓ Low ripple and noise
- ✓ Over current and short circuit protection
- ✓ Remote on/off
- ✓ Adjustable output voltage



Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (A)	Efficiency Typ.
DMV25-1211	12(9~18)	3.3	5	82%
DMV25-1212		5	5	82%
DMV25-1213		9	2.77	87%
DMV25-1214		12	2.08	87%
DMV25-1215		15	1.66	87%
DMV25-1216		24	1.04	87%
DMV25-1221		±5	2.5	82%
DMV25-1222		±9	1.39	87%
DMV25-1223		±12	1.04	87%
DMV25-1224		±15	0.83	87%
DMV25-1225		±24	0.52	87%
DMV25-2411		24(18~36)	3.3	5
DMV25-2412	5		5	82%
DMV25-2413	9		2.77	87%
DMV25-2414	12		2.08	87%
DMV25-2415	15		1.66	87%
DMV25-2416	24		1.04	87%
DMV25-2421	±5		2.5	82%
DMV25-2422	±9		1.39	87%
DMV25-2423	±12		1.04	87%
DMV25-2424	±15		0.83	87%
DMV25-2425	±24		0.52	87%
DMV25-4811	48(36~72)		3.3	5
DMV25-4812		5	5	82%
DMV25-4813		9	2.77	87%
DMV25-4814		12	2.08	87%
DMV25-4815		15	1.66	87%
DMV25-4816		24	1.04	87%
DMV25-4821		±5	2.5	82%
DMV25-4822		±9	1.39	87%
DMV25-4823		±12	1.04	87%

DMV-25 SERIES, 25WATT, 2:1 INPUT RANGE

Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (A)	Efficiency Typ.
DMV25-4824	48(36~72)	±15	0.83	87%
DMV25-4825		±24	0.52	87%
DMV25-11011	110(72~144)	3.3	5	82%
DMV25-11012		5	5	82%
DMV25-11013		9	2.77	87%
DMV25-11014		12	2.08	87%
DMV25-11015		15	1.66	87%
DMV25-11016		24	1.04	87%
DMV25-11021		±5	2.5	82%
DMV25-11022		±9	1.39	87%
DMV25-11023		±12	1.04	87%
DMV25-11024		±15	0.83	87%
DMV25-11025		±24	0.52	87%

Notes:

1. Other input and output models may available on request;
2. Above models are default to metal case.

ELECTRICAL

Input voltage range	12V	9-18Vdc
	24V	18-36Vdc
	48V	36-72Vdc
	110V	72-144Vdc
Remote control (Low level remote)	High level or vacant	Turn on
	Low level or connect ground	Turn off
Output voltage accuracy	---	Vo1, Vo2: ±1%, ±3%
Output voltage adjustable	---	±10% max.
Line regulation	Nominal Load, full voltage	Vo1, Vo2: ±0.2%, ±1.5%
Load regulation	20% ~ 100% rated load	Vo1, Vo2: ±0.5%, ±4%
Dynamic response (transient/recovery time)	5%-50%-75% load capability	$\Delta V_{o1}/\Delta t$: ±4.0%/500 μ s
Ripple and noise	20MHz BM, full load	Vo≤5.0V, ≤50mVp-p
		Vo≥48V, ≤180mVp-p
		Other, ≤100mVp-p
Isolation voltage (<2mA/min)	Input to output	1500Vdc
	Input to case	500Vdc
Switching frequency	300KHz	330KHz max.
Turn-on delay time	---	≤200ms
Operating temperature range	Free air	-25°C to +55°C

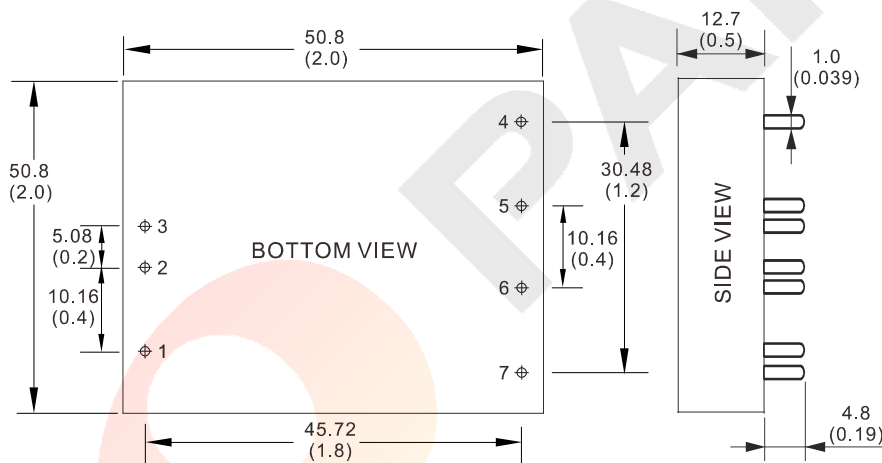
DMV-25 SERIES, 25WATT, 2:1 INPUT RANGE

ELECTRICAL

Storage temperature range	---	-45°C to +105°C
Input under voltage protection	When input voltage is lower than the low input voltage	Auto-recovery
Over current protection	---	Auto-recovery
Short circuit protection	---	Continuous auto-recovery
Cooling method	---	Cooling by air convection
Relative humidity	---	10%-90% max.
Weight	---	61.8g
MTBF	Bellcore TR-332, 25°C	2x10 ⁵ Hrs

Notes: Unless otherwise specified, all the parameters of the test conditions are as follows: ambient temperature 25°C, the nominal input voltage, pure resistive nominal load.

MECHANICAL



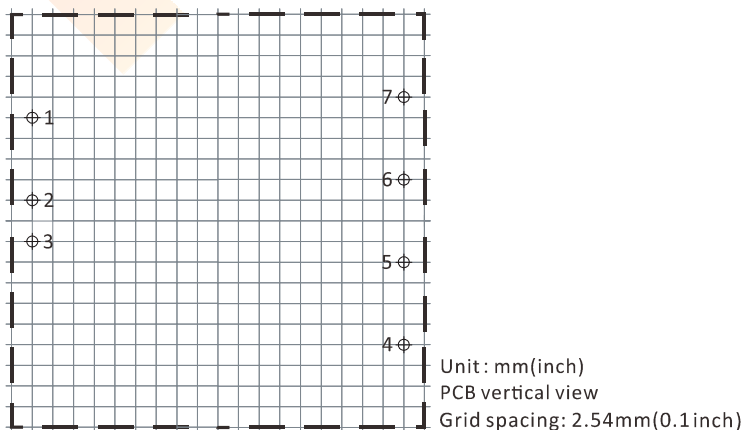
CONNECTION

PIN #	SINGLE	DUAL
1	REM	REM
2	-Vin	-Vin
3	+Vin	+Vin
4	No pin	+Vo1
5	+Vo	COM
6	GND	-Vo2
7	TRIM	TRIM

Note:

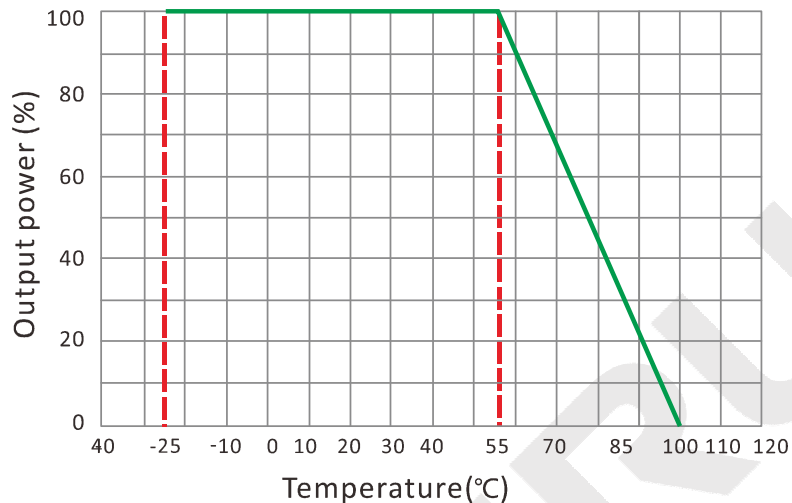
* Unit is mm(inch).

LAYOUT



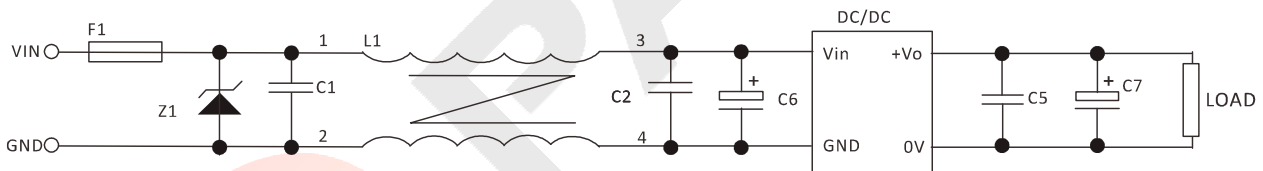
DMV-25 SERIES, 25WATT, 2:1 INPUT RANGE

ELECTRICAL CURVE



NOTES

RECOMMENDED TEST AND APPLICATION CIRCUIT



1. TVS&FUSE be helpful with over voltage protection and inrush limiting. Recommended FUSE better be 1.5~2times of the rated current .
2. The input filter capacitor C6 could select the aluminum electrolytic capacitors or tantalum capacitors, and the withstand voltage should be greater than the highest input voltage. Recommended capacitor should be between 22 μ F~100 μ F.
3. C1,C2 for the input filter capacitor,0.1~1 μ F high-frequency ceramics capacitor or chip capacitor are recommended. The withstand voltage of output filter C5, C7 should be greater than the highest output voltage. Recommended capacitor of C7 better within 100 μ F and C5 connected with the chip to reduce the input voltage peak, recommended 0.1~1 μ F high-frequency ceramics capacitor or chip capacitor.

DMV-25W SERIES, 25WATT, 4:1 INPUT RANGE

FEATURES:

- ✓ 2 year warranty
- ✓ Wide(4:1) input range
- ✓ Six-side shielded metal case
- ✓ Low ripple and noise
- ✓ Over current and short circuit protection
- ✓ Remote on/off
- ✓ Adjustable output voltage



Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (A)	Efficiency Typ.
DMV25W-2411	24(9~36)	3.3	5	82%
DMV25W-2412		5	5	82%
DMV25W-2413		9	2.77	87%
DMV25W-2414		12	2.08	87%
DMV25W-2415		15	1.66	87%
DMV25W-2416		24	1.04	87%
DMV25W-2421		±5	2.5	82%
DMV25W-2422		±9	1.39	87%
DMV25W-2423		±12	1.04	87%
DMV25W-2424		±15	0.83	87%
DMV25W-2425		±24	0.52	87%
DMV25W-4811		48(18~72)	3.3	5
DMV25W-4812	5		5	82%
DMV25W-4813	9		2.77	87%
DMV25W-4814	12		2.08	87%
DMV25W-4815	15		1.66	87%
DMV25W-4816	24		1.04	87%
DMV25W-4821	±5		2.5	82%
DMV25W-4822	±9		1.39	87%
DMV25W-4823	±12		1.04	87%
DMV25W-4824	±15		0.83	87%
DMV25W-4825	±24		0.52	87%

Notes:

1. Other input and output models may available on request;
2. Above models are default to metal case.

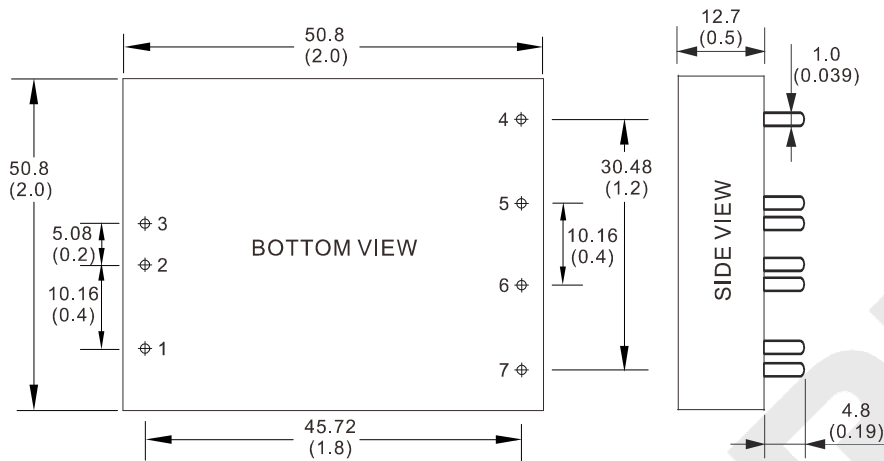
DMV-25W SERIES, 25WATT, 4:1 INPUT RANGE

ELECTRICAL		
Input voltage range	18V	9-36Vdc
	36V	18-72Vdc
Remote control	High level or vacant	Turn on
(Low level remote)	Low level or connect ground	Turn off
Output voltage accuracy	---	Vo1, Vo2: $\pm 1\%$, $\pm 3\%$
Output voltage adjustable	---	$\pm 10\%$ max.
Line regulation	Nominal Load, full voltage	Vo1, Vo2: $\pm 0.2\%$, $\pm 1.5\%$
Load regulation	20% ~ 100% rated load	Vo1, Vo2: $\pm 0.5\%$, $\pm 4\%$
Dynamic response (transient/recovery time)	5%-50%-75% load capability	$\Delta V_{o1}/\Delta t$: $\pm 4.0\%/500\mu s$
Ripple and noise	20MHz BM, full load	Vo \leq 5.0V, $\leq 50mVp-p$
		Vo \geq 48V, $\leq 180mVp-p$
		Other, $\leq 100mVp-p$
Isolation voltage ($< 2mA/min$)	Input to output	1500Vdc
	Input to case	500Vdc
Switching frequency	300KHz	330KHz max.
Turn-on delay time	---	$\leq 200ms$
Operating temperature range	Free air	-25°C to +55°C
Storage temperature range	---	-45°C to +105°C
Input under voltage protection	When input voltage is lower than the low input voltage	Auto-recovery
Over current protection	---	Auto-recovery
Short circuit protection	---	Continuous auto-recovery
Cooling method	---	Cooling by air convection
Relative humidity	---	10%-90% max.
Weight	---	61.8g
MTBF	Bellcore TR-332, 25°C	2×10^5 Hrs

Notes: Unless otherwise specified, all the parameters of the test conditions are as follows: ambient temperature 25°C, the nominal input voltage, pure resistive nominal load.

DMV-25W SERIES, 25WATT, 4:1 INPUT RANGE

MECHANICAL



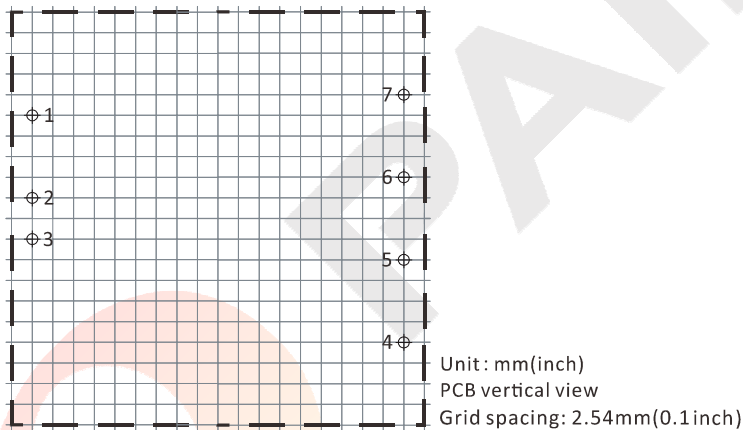
CONNECTION

PIN #	SINGLE	DUAL
1	REM	REM
2	-Vin	-Vin
3	+Vin	+Vin
4	No pin	+Vo1
5	+Vo	COM
6	GND	-Vo2
7	TRIM	TRIM

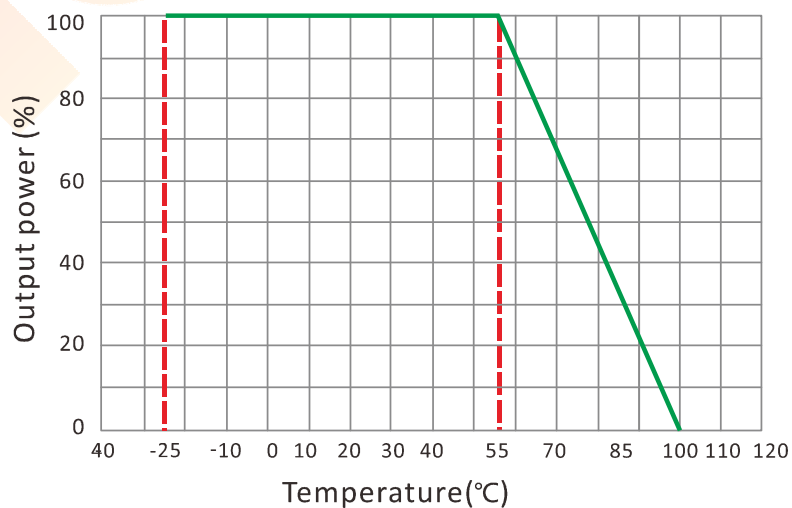
Note:

* Unit is mm(inch).

LAYOUT



ELECTRICAL CURVE



DMV-30 SERIES, 30WATT, 2:1 INPUT RANGE

FEATURES:

- ✓ 2 year warranty
- ✓ Six-side shielded metal case
- ✓ Low ripple and noise
- ✓ Over current and short circuit protection
- ✓ Remote on/off
- ✓ Adjustable output voltage



Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (A)	Efficiency Typ.	
DMV30-1215	12(9~18)	3.3	6	82%	
DMV30-1211		5	6	82%	
DMV30-1216		9	3.3	78%	
DMV30-1212		12	2.5	87%	
DMV30-1213		15	2	87%	
DMV30-1214		24	1.25	87%	
DMV30-1221		±5	3	82%	
DMV30-1223		±9	1.65	78%	
DMV30-1222		±12	1.25	87%	
DMV30-1224		±15	1	78%	
DMV30-1225		±24	0.625	78%	
DMV30-2411		24(18~36)	5	6	82%
DMV30-2416	9		3.3	78%	
DMV30-2412	12		2.5	87%	
DMV30-2413	15		2	87%	
DMV30-2414	24		1.25	87%	
DMV30-2421	±5		3	82%	
DMV30-2423	±9		1.65	78%	
DMV30-2422	±12		1.25	87%	
DMV30-2424	±15		1	78%	
DMV30-2425	±24		0.625	78%	
DMV30-4811	48(36~72)		5	6	82%
DMV30-4816			9	3.3	78%
DMV30-4812		12	2.5	87%	
DMV30-4813		15	2	87%	
DMV30-4814		24	1.25	87%	
DMV30-4821		±5	3	82%	
DMV30-4823		±9	1.65	78%	
DMV30-4822		±12	1.25	87%	
DMV30-4824		±15	1	78%	
DMV30-4825		±24	0.625	78%	

DMV-30 SERIES, 30WATT, 2:1 INPUT RANGE

Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (A)	Efficiency Typ.
DMV30-11011	110(72~144)	5	6	82%
DMV30-11016		9	3.3	78%
DMV30-11012		12	2.5	87%
DMV30-11013		15	2	87%
DMV30-11014		24	1.25	87%
DMV30-11021		±5	3	82%
DMV30-11023		±9	1.65	78%
DMV30-11022		±12	1.25	87%
DMV30-11024		±15	1	78%
DMV30-11025		±24	0.625	78%

Notes:

1. Other input and output models may available on request;
2. Above models are default to metal case.

ELECTRICAL

Input voltage range	12V	9-18Vdc
	24V	18-36Vdc
	48V	36-72Vdc
	110V	72-144Vdc
Remote control (Low level remote)	High level or vacant	Turn on
	Low level or connect ground	Turn off
Output voltage accuracy	---	Vo1, Vo2: ±1%, ±3%
Output voltage adjustable	---	±10% max.
Line regulation	Nominal Load, full voltage	Vo1, Vo2: ±0.2%, ±1.5%
Load regulation	20% ~ 100% rated load	Vo1, Vo2: ±0.5%, ±4%
Dynamic response (transient/recovery time)	5%-50%-75% load capability	$\Delta V_{o1}/\Delta t$: ±4.0%/500 μ s
Ripple and noise	20MHz BM, full load	Vo≤5.0V, ≤50mVp-p
		Vo≥48V, ≤180mVp-p
		Other, ≤100mVp-p
Isolation voltage (<2mA/min)	Input to output	1500Vdc
	Input to case	500Vdc
Switching frequency	300KHz	330KHz max.
Turn-on delay time	---	≤200ms
Operating temperature range	Free air	-25°C to +55°C
Storage temperature range	---	-45°C to +105°C
Input under voltage protection	When input voltage is lower than the low input voltage	Auto-recovery

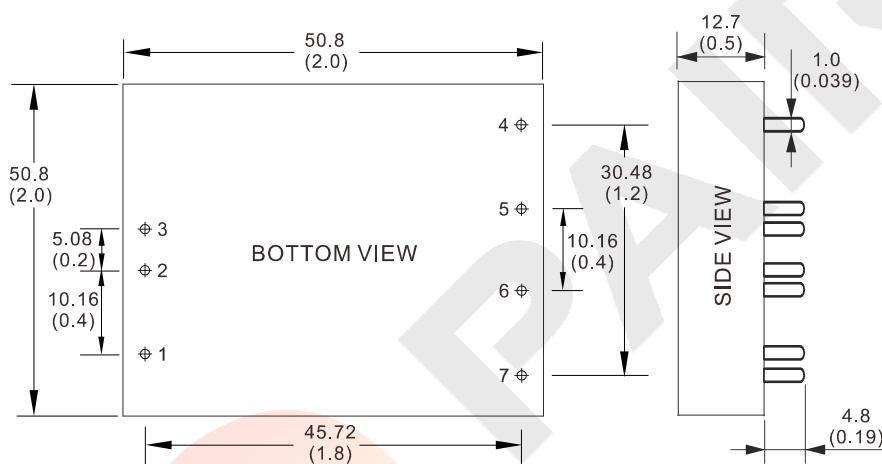
DMV-30 SERIES, 30WATT, 2:1 INPUT RANGE

ELECTRICAL

Over current protection	---	Auto-recovery
Short circuit protection	---	Continuous auto-recovery
Cooling method	---	Cooling by air convection
Relative humidity	---	10%-90% max.
Weight	---	61.8g
MTBF	Bellcore TR-332, 25°C	2x10 ⁵ Hrs

Notes: Unless otherwise specified, all the parameters of the test conditions are as follows: ambient temperature 25°C, the nominal input voltage, pure resistive nominal load.

MECHANICAL



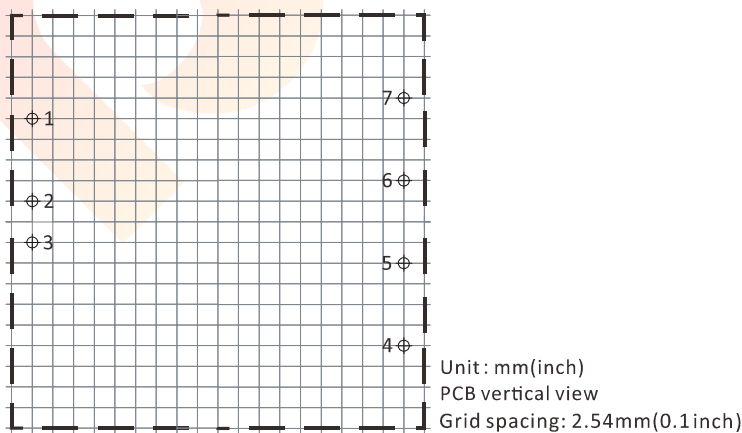
CONNECTION

PIN #	SINGLE	DUAL
1	REM	REM
2	-Vin	-Vin
3	+Vin	+Vin
4	No pin	+Vo1
5	+Vo	COM
6	GND	-Vo2
7	TRIM	TRIM

Note:

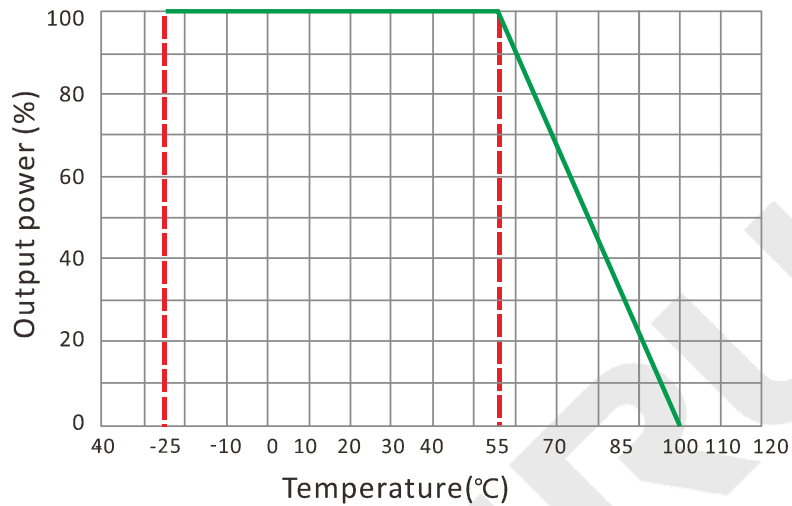
* Unit is mm(inch).

LAYOUT



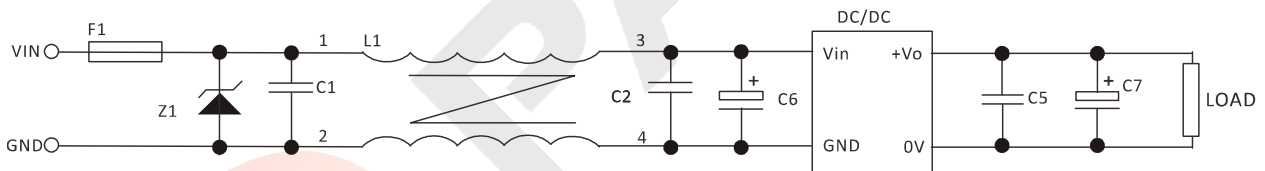
DMV-30 SERIES, 30WATT, 2:1 INPUT RANGE

ELECTRICAL CURVE



NOTES

RECOMMENDED TEST AND APPLICATION CIRCUIT



1. TVS&FUSE be helpful with over voltage protection and inrush limiting. Recommended FUSE better be 1.5~2times of the rated current .
2. The input filter capacitor C6 could select the aluminum electrolytic capacitors or tantalum capacitors, and the withstand voltage should be greater than the highest input voltage. Recommended capacitor should be between 22 μ F~100 μ F.
3. C1,C2 for the input filter capacitor,0.1~1 μ F high-frequency ceramics capacitor or chip capacitor are recommended. The withstand voltage of output filter C5, C7 should be greater than the highest output voltage. Recommended capacitor of C7 better within 100 μ F and C5 connected with the chip to reduce the input voltage peak, recommended 0.1~1 μ F high-frequency ceramics capacitor or chip capacitor.

DMV-30W SERIES, 30WATT, 4:1 INPUT RANGE
FEATURES:

- ✓ 2 year warranty
- ✓ Wide(4:1) input range
- ✓ Six-side shielded metal case
- ✓ Low ripple and noise
- ✓ Over current and short circuit protection
- ✓ Remote on/off
- ✓ Adjustable output voltage



Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (A)	Efficiency Typ.
DMV30W-2411	24(9~36)	5	6	82%
DMV30W-2415		9	3.3	78%
DMV30W-2412		12	2.5	87%
DMV30W-2413		15	2	87%
DMV30W-2414		24	1.25	87%
DMV30W-2421		±5	3	82%
DMV30W-2423		±9	1.65	78%
DMV30W-2422		±12	1.25	87%
DMV30W-2424		±15	1	78%
DMV30W-2425		±24	0.625	78%
DMV30W-4811		48(18~72)	5	6
DMV30W-4815	9		3.3	78%
DMV30W-4812	12		2.5	87%
DMV30W-4813	15		2	87%
DMV30W-4814	24		1.25	87%
DMV30W-4821	±5		3	82%
DMV30W-4823	±9		1.65	78%
DMV30W-4822	±12		1.25	87%
DMV30W-4824	±15		1	78%
DMV30W-4825	±24		0.625	78%

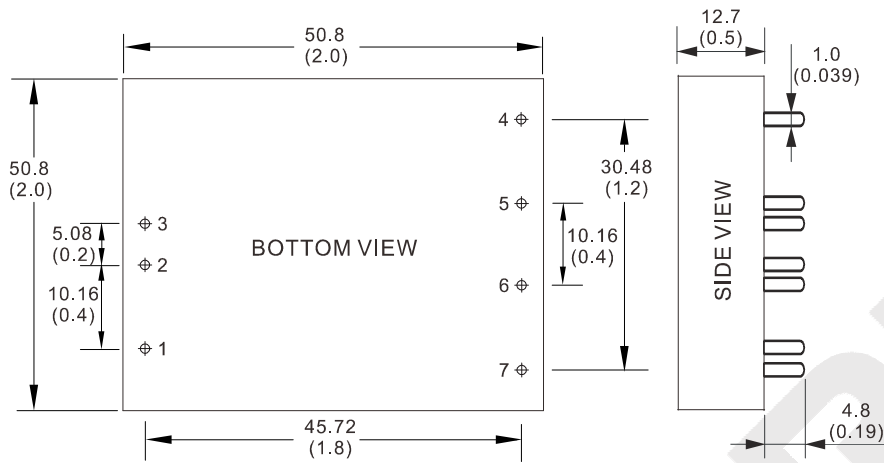
Notes:

1. Other input and output models may available on request;
2. Above models are default to metal case.

DMV-30W SERIES, 30WATT, 4:1 INPUT RANGE
ELECTRICAL

Input voltage range	18V	9-36Vdc
	36V	18-72Vdc
Remote control (Low level remote)	High level or vacant	Turn on
	Low level or connect ground	Turn off
Output voltage accuracy	---	Vo1, Vo2: $\pm 1\%$, $\pm 3\%$
Output voltage adjustable	---	$\pm 10\%$ max.
Line regulation	Nominal Load, full voltage	Vo1, Vo2: $\pm 0.2\%$, $\pm 1.5\%$
Load regulation	20% ~ 100% rated load	Vo1, Vo2: $\pm 0.5\%$, $\pm 4\%$
Dynamic response (transient/recovery time)	5%-50%-75% load capability	$\Delta V_{o1}/\Delta t$: $\pm 4.0\%/500\mu s$
Ripple and noise	20MHz BM, full load	Vo \leq 5.0V, $\leq 50mVp-p$
		Vo \geq 48V, $\leq 180mVp-p$
		Other, $\leq 100mVp-p$
Isolation voltage ($< 2mA/min$)	Input to output	1500Vdc
	Input to case	500Vdc
Switching frequency	300KHz	330KHz max.
Turn-on delay time	---	$\leq 200ms$
Operating temperature range	Free air	-25°C to +55°C
Storage temperature range	---	-45°C to +105°C
Input under voltage protection	When input voltage is lower than the low input voltage	Auto-recovery
Over current protection	---	Auto-recovery
Short circuit protection	---	Continuous auto-recovery
Cooling method	---	Cooling by air convection
Relative humidity	---	10%-90% max.
Weight	---	61.8g
MTBF	Bellcore TR-332, 25°C	2×10^5 Hrs

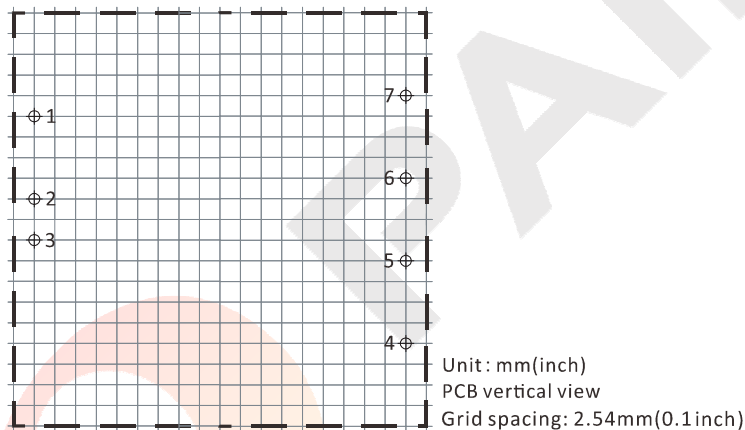
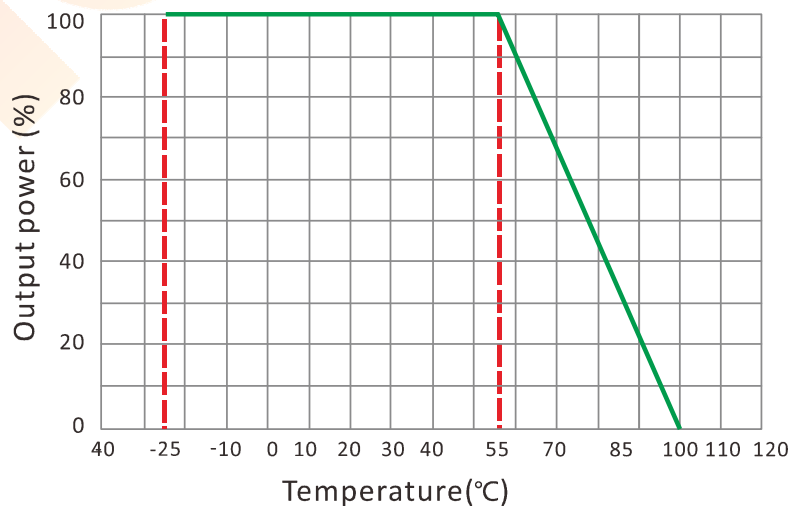
Notes: Unless otherwise specified, all the parameters of the test conditions are as follows: ambient temperature 25°C, the nominal input voltage, pure resistive nominal load.

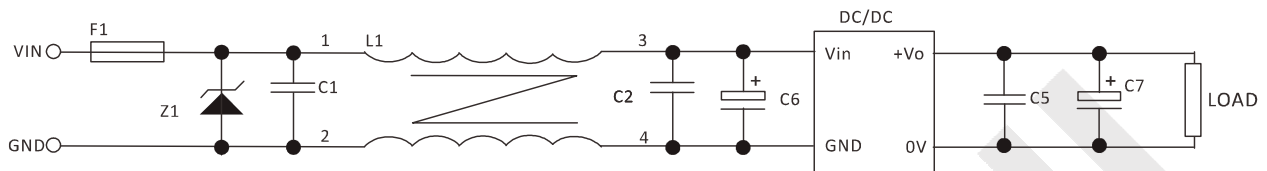
DMV-30W SERIES, 30WATT, 4:1 INPUT RANGE
MECHANICAL

CONNECTION

PIN #	SINGLE	DUAL
1	REM	REM
2	-Vin	-Vin
3	+Vin	+Vin
4	No pin	+Vo1
5	+Vo	COM
6	GND	-Vo2
7	TRIM	TRIM

Note:

* Unit is mm(inch).

LAYOUT

ELECTRICAL CURVE


DMV-30W SERIES, 30WATT, 4:1 INPUT RANGE
NOTES
RECOMMENDED TEST AND APPLICATION CIRCUIT


1. TVS&FUSE be helpful with over voltage protection and inrush limiting. Recommended FUSE better be 1.5~2times of the rated current .
2. The input filter capacitor C6 could select the aluminum electrolytic capacitors or tantalum capacitors, and the withstand voltage should be greater than the highest input voltage. Recommended capacitor should be between 22 μ F~100 μ F.
3. C1,C2 for the input filter capacitor,0.1~1 μ F high-frequency ceramics capacitor or chip capacitor are recommended. The withstand voltage of output filter C5, C7 should be greater than the highest output voltage. Recommended capacitor of C7 better within 100 μ F and C5 connected with the chip to reduce the input voltage peak, recommended 0.1~1 μ F high-frequency ceramics capacitor or chip capacitor.

DNV-6 SERIES, 6WATT, 2:1 INPUT RANGE
FEATURES:

- ✓ 1500Vdc isolation voltage
- ✓ Metal/Plastic case with low ripple and noise
- ✓ Short circuit and input under voltage protection
- ✓ Operating temperature range -40°C to +85°C
- ✓ 3 year warranty



Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (mA)	Efficiency Typ.
DNV6-0510	5(4.5~9)	3.3	1200	72%
DNV6-0511		5	1200	75%
DNV6-0515		9	667	78%
DNV6-0512		12	500	83%
DNV6-0513		15	400	80%
DNV6-0514		24	250	80%
DNV6-0521		±5	600	75%
DNV6-0525		±9	333	79%
DNV6-0522		±12	250	78%
DNV6-0523		±15	200	82%
DNV6-0524		±24	125	82%
DNV6-1210		12(9~18)	3.3	1200
DNV6-1211	5		1200	79%
DNV6-1215	9		667	81%
DNV6-1212	12		500	82%
DNV6-1213	15		400	82%
DNV6-1214	24		250	82%
DNV6-1221	±5		600	80%
DNV6-1225	±9		333	82%
DNV6-1222	±12		250	82%
DNV6-1223	±15		200	83%
DNV6-1224	±24		125	84%
DNV6-2410	24(18~36)		3.3	1200
DNV6-2411		5	1200	80%
DNV6-2415		9	667	81%
DNV6-2412		12	500	82%
DNV6-2413		15	400	82%
DNV6-2414		24	250	84%
DNV6-2421		±5	600	80%
DNV6-2425		±9	333	81%

DNV-6 SERIES, 6WATT, 2:1 INPUT RANGE

Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (mA)	Efficiency Typ.
DNV6-2422	24(18~36)	±12	250	82%
DNV6-2423		±15	200	83%
DNV6-2424		±24	125	84%
DNV6-4811	48(36~72)	5	1200	82%
DNV6-4815		9	667	82%
DNV6-4812		12	500	82%
DNV6-4813		15	400	84%
DNV6-4814		24	250	85%
DNV6-4821		±5	600	80%
DNV6-4825		±9	333	81%
DNV6-4822		±12	250	82%
DNV6-4823		±15	200	83%
DNV6-4824		±24	125	83%

Notes: other input and output models may available on request.

Above models are default to plastic case, you may request for the models with metal case, plus "M" in the suffix.

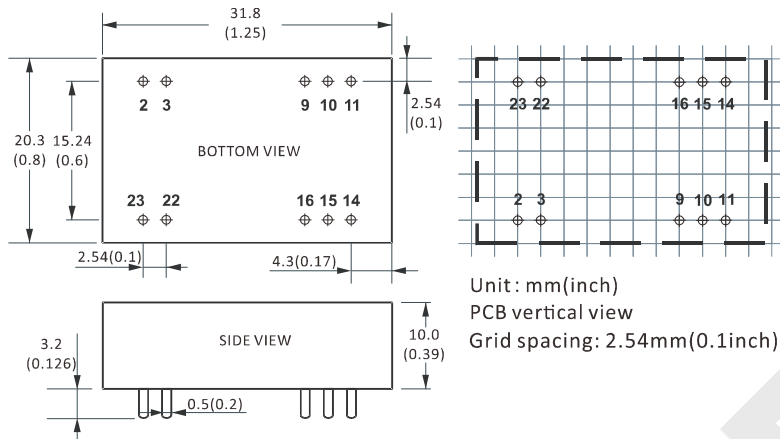
ELECTRICAL

Output voltage accuracy (Full voltage, full load)	+Vo -Vo	±2% max. ±3% max.
Line regulation	Nominal Load, full voltage	±0.5% max.
Load regulation	20% ~ 100% full load	±1% max.
Ripple and noise	20MHz BM, full load	100mVp-p max.
Operating frequency	Typical value	300KHz typ.
Isolation voltage (<1mA/min)	Input to output	1500Vdc
Isolation resistance	---	1000mΩ
Temperature coefficient	---	±0.03%/°C max.
Operating temperature range	---	-40°C to +85°C
Storage temperature range	---	-55°C to +125°C
Short circuit protection	---	Continuous, auto-recovery
Relative humidity	---	10%-90%
MTBF	Bellcore TR-332, 25°C	1000KHrs
Weight	---	18g

Notes: All the parameters are measured at 25°C ambient temperature, humidity < 75%, nominal input voltage, full load and after warm-up, unless otherwise specified.

DNV-6 SERIES, 6WATT, 2:1 INPUT RANGE

MECHANICAL



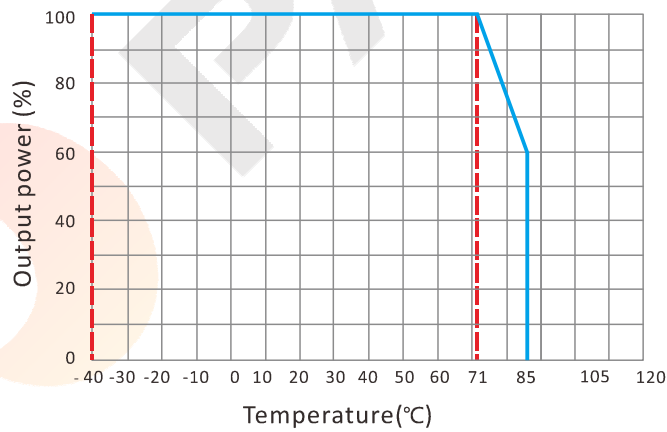
CONNECTION

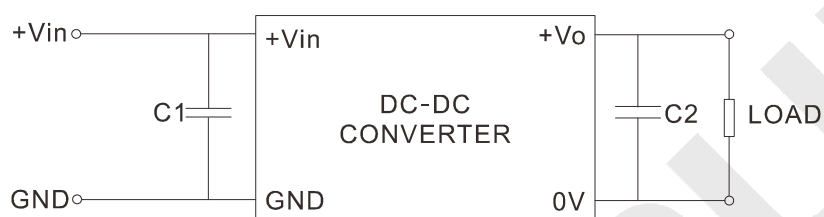
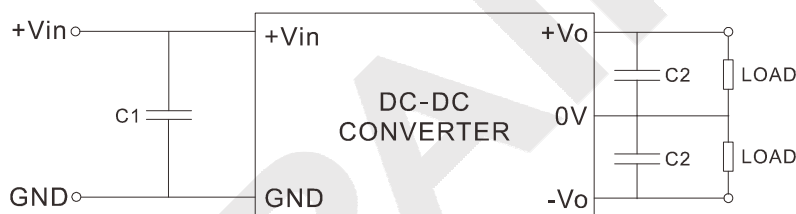
PIN #	SINGLE	DUAL
2	GND	GND
3	GND	GND
9	NC	0V
10	No Pin	No Pin
11	NC	-Vo2
14	+Vo	+Vo1
15	No Pin	No Pin
16	0V	0V
22	+Vin	+Vin
23	+Vin	+Vin

Note:

* Unit is mm(inch).

ELECTRICAL CURVE



DNV-6 SERIES, 6WATT, 2:1 INPUT RANGE
NOTES
RECOMMENDED TEST AND APPLICATION CIRCUIT
SINGLE OUTPUT

DUAL OUTPUT

CAPACITOR SELECTION

INPUT VOLTAGE	C1	SINGLE OUTPUT	C2	DUAL OUTPUT	C2
5VDC	100 μ F	5VDC	470 μ F	\pm 5VDC	220 μ F
12VDC	47 μ F	9VDC	220 μ F	\pm 9VDC	100 μ F
24VDC	47 μ F	12VDC	100 μ F	\pm 12VDC	47 μ F
48VDC	10 μ F	15VDC	100 μ F	\pm 15VDC	47 μ F
--	--	24VDC	47 μ F	\pm 24VDC	22 μ F

DNV-6F SERIES, 6WATT, 2:1 INPUT RANGE
FEATURES:

- ✓ 3000Vdc isolation voltage
- ✓ Metal/Plastic case with low ripple and noise
- ✓ Short circuit and input under voltage protection
- ✓ Operating temperature range -40°C to +85°C
- ✓ 3 year warranty



Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (mA)	Efficiency Typ.
DNV6-0510F	5(4.5~9)	3.3	1200	70%
DNV6-0511F		5	1200	74%
DNV6-0515F		9	667	77%
DNV6-0512F		12	500	82%
DNV6-0513F		15	400	80%
DNV6-0514F		24	250	80%
DNV6-0521F		±5	600	72%
DNV6-0525F		±9	333	78%
DNV6-0522F		±12	250	78%
DNV6-0523F		±15	200	82%
DNV6-0524F		±24	125	82%
DNV6-1210F	12(9~18)	3.3	1200	72%
DNV6-1211F		5	1200	78%
DNV6-1215F		9	667	81%
DNV6-1212F		12	500	82%
DNV6-1213F		15	400	80%
DNV6-1214F		24	250	82%
DNV6-1221F		±5	600	80%
DNV6-1225F		±9	333	80%
DNV6-1222F		±12	250	82%
DNV6-1223F		±15	200	83%
DNV6-1224F		±24	125	82%
DNV6-2410F	24(18~36)	3.3	1200	72%
DNV6-2411F		5	1200	80%
DNV6-2415F		9	667	80%
DNV6-2412F		12	500	82%
DNV6-2413F		15	400	82%
DNV6-2414F		24	250	84%
DNV6-2421F		±5	600	80%
DNV6-2425F		±9	333	80%

DNV-6F SERIES, 6WATT, 2:1 INPUT RANGE

Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (mA)	Efficiency Typ.
DNV6-2422F	24(18~36)	±12	250	82%
DNV6-2423F		±15	200	82%
DNV6-2424F		±24	125	84%
DNV6-4811F	48(36~72)	5	1200	82%
DNV6-4815F		9	667	82%
DNV6-4812F		12	500	80%
DNV6-4813F		15	400	84%
DNV6-4814F		24	250	80%
DNV6-4821F		±5	600	80%
DNV6-4825F		±9	333	81%
DNV6-4822F		±12	250	82%
DNV6-4823F		±15	200	80%
DNV6-4824F		±24	125	80%

Notes: other input and output models may available on request.

Above models are default to plastic case, you may request for the models with metal case, plus "M" in the suffix.

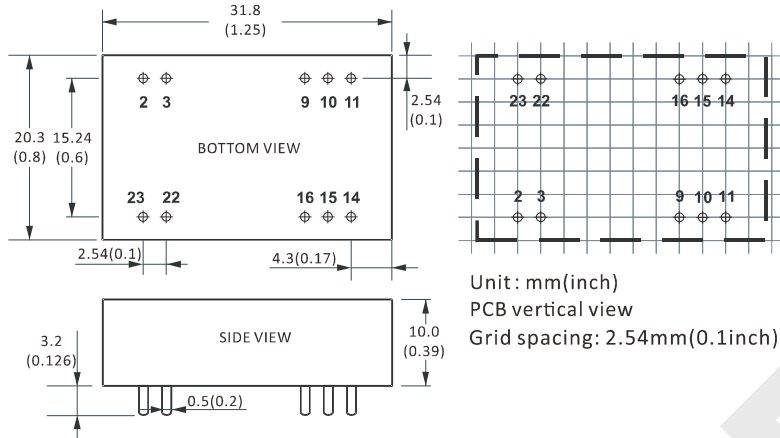
ELECTRICAL

Output voltage accuracy (Full voltage, full load)	+Vo -Vo	±2% max. ±3% max.
Line regulation	Nominal Load, full voltage	±0.5% max.
Load regulation	20% ~ 100% full load	±1% max.
Ripple and noise	20MHz BM, full load	100mVp-p max.
Operating frequency	Typical value	300KHz typ.
Isolation voltage (<1mA/min)	Input to output	3000Vdc
Isolation resistance	---	1000mΩ
Temperature coefficient	---	±0.03%/°C max.
Operating temperature range	---	-40°C to +85°C
Storage temperature range	---	-55°C to +125°C
Short circuit protection	---	Continuous, auto-recovery
Relative humidity	---	10%-90%
MTBF	Bellcore TR-332, 25°C	1000KHrs
Weight	---	18g

Notes: All the parameters are measured at 25°C ambient temperature, humidity < 75%, nominal input voltage, full load and after warm-up, unless otherwise specified.

DNV-6F SERIES, 6WATT, 2:1 INPUT RANGE

MECHANICAL



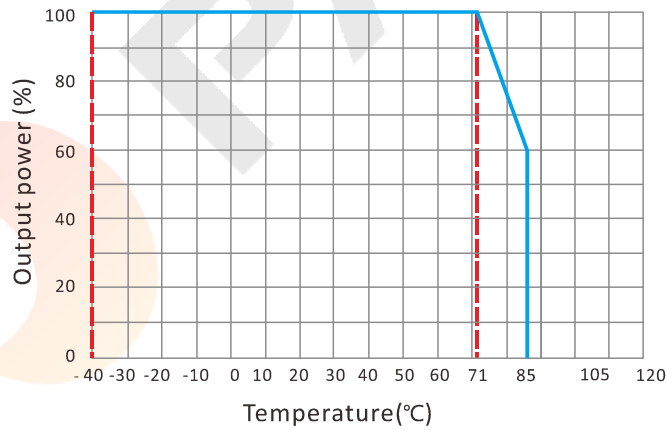
CONNECTION

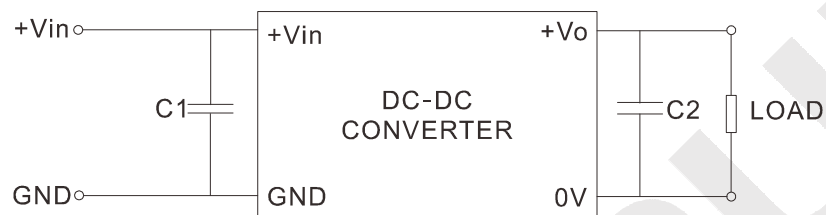
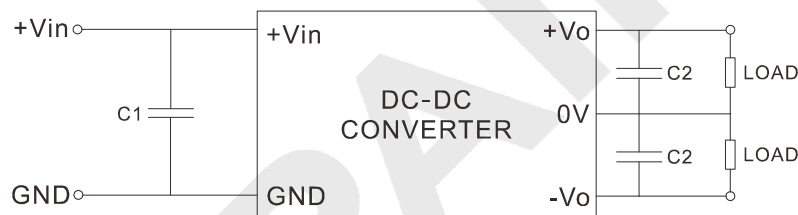
PIN #	SINGLE	DUAL
2	GND	GND
3	GND	GND
9	NC	0V
10	No Pin	No Pin
11	NC	-Vo2
14	+Vo	+Vo1
15	No Pin	No Pin
16	0V	0V
22	+Vin	+Vin
23	+Vin	+Vin

Note:

* Unit is mm(inch).

ELECTRICAL CURVE



DNV-6F SERIES, 6WATT, 2:1 INPUT RANGE
NOTES
RECOMMENDED TEST AND APPLICATION CIRCUIT
SINGLE OUTPUT

DUAL OUTPUT

CAPACITOR SELECTION

INPUT VOLTAGE	C1	SINGLE OUTPUT	C2	DUAL OUTPUT	C2
5VDC	100 μ F	5VDC	470 μ F	\pm 5VDC	220 μ F
12VDC	47 μ F	9VDC	220 μ F	\pm 9VDC	100 μ F
24VDC	47 μ F	12VDC	100 μ F	\pm 12VDC	47 μ F
48VDC	10 μ F	15VDC	100 μ F	\pm 15VDC	47 μ F
--	--	24VDC	47 μ F	\pm 24VDC	22 μ F

DNV-6W SERIES, 6WATT, 4:1 INPUT RANGE
FEATURES:

- ✓ 1500Vdc isolation voltage
- ✓ Metal/Plastic case with low ripple and noise
- ✓ Short circuit and input under voltage protection
- ✓ Operating temperature range -40°C to +85°C
- ✓ 3 year warranty



Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (mA)	Efficiency Typ.
DNV6W-2411	24(9~36)	5	1200	82%
DNV6W-2415		9	667	81%
DNV6W-2412		12	500	82%
DNV6W-2413		15	400	82%
DNV6W-2414		24	250	83%
DNV6W-2421		±5	600	80%
DNV6W-2425		±9	333	81%
DNV6W-2422		±12	250	82%
DNV6W-2423		±15	200	83%
DNV6W-2424		±24	125	84%
DNV6W-4811		48(18~72)	5	1200
DNV6W-4815	9		667	82%
DNV6W-4812	12		500	82%
DNV6W-4813	15		400	84%
DNV6W-4814	24		250	84%
DNV6W-4821	±5		600	80%
DNV6W-4825	±9		333	81%
DNV6W-4822	±12		250	82%
DNV6W-4823	±15		200	83%
DNV6W-4824	±24		125	84%

Notes: other input and output models may available on request.

Above models are default to plastic case, you may request for the models with metal case, plus "M" in the suffix.

ELECTRICAL

Output voltage accuracy (Full voltage, full load)	+Vo	±2% max.
	-Vo	±3% max.
Line regulation	Nominal Load, full voltage	±0.5% max.
Load regulation	20% ~ 100% full load	±1% max.
Ripple and noise	20MHz BM, full load	100mVp-p max.

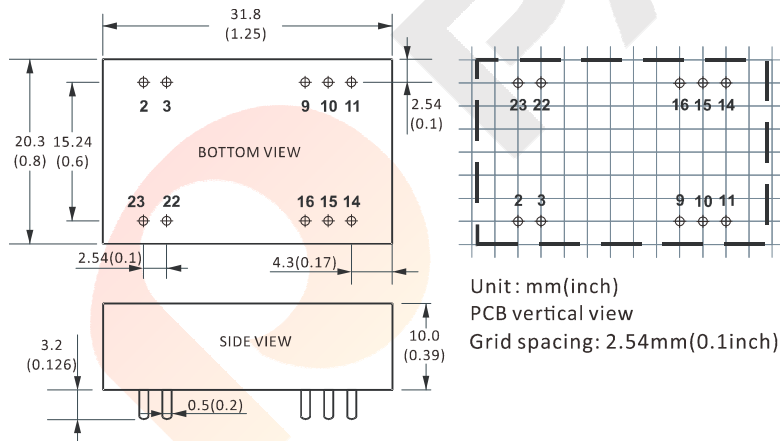
DNV-6W SERIES, 6WATT, 4:1 INPUT RANGE

ELECTRICAL

Operating frequency	Typical value	300KHz max.
Isolation voltage (<1mA/min)	Input to output	1500Vdc
Isolation resistance	---	1000mΩ
Temperature coefficient	---	±0.03%/°C max.
Operating temperature range	---	-40°C to +85°C
Storage temperature range	---	-55°C to +125°C
Short circuit protection	---	Continuous, auto-recovery
Relative humidity	---	10%-90%
MTBF	Bellcore TR-332, 25°C	1000KHrs
Weight	---	18g

Notes: All the parameters are measured at 25°C ambient temperature, humidity < 75%, nominal input voltage, full load and after warm-up, unless otherwise specified.

MECHANICAL

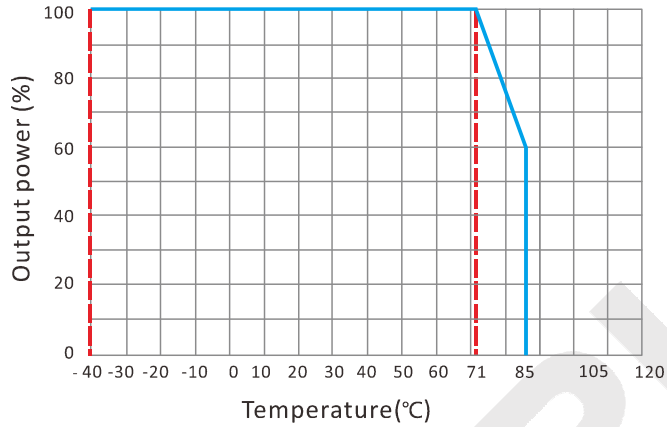
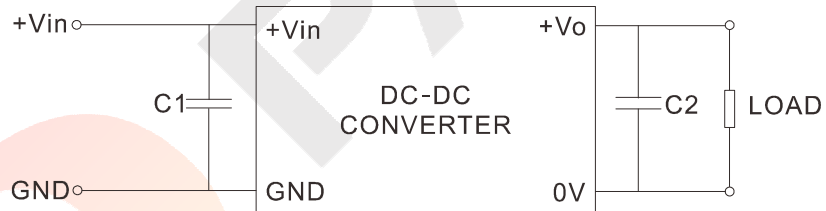
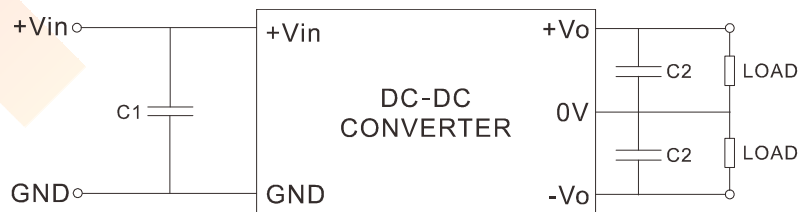


CONNECTION

PIN #	SINGLE	DUAL
2	GND	GND
3	GND	GND
9	NC	0V
10	No Pin	No Pin
11	NC	-Vo2
14	+Vo	+Vo1
15	No Pin	No Pin
16	0V	0V
22	+Vin	+Vin
23	+Vin	+Vin

Note:

* Unit is mm (inch)

DNV-6W SERIES, 6WATT, 4:1 INPUT RANGE
ELECTRICAL CURVE

NOTES
RECOMMENDED TEST AND APPLICATION CIRCUIT
SINGLE OUTPUT

DUAL OUTPUT


DNV-6W SERIES, 6WATT, 4:1 INPUT RANGE

NOTES

CAPACITOR SELECTION

INPUT VOLTAGE	C1	SINGLE OUTPUT	C2	DUAL OUTPUT	C2
24VDC	100 μ F	5VDC	1000 μ F	\pm 5VDC	680 μ F
48VDC	47 μ F	9VDC	470 μ F	\pm 9VDC	330 μ F
--	--	12VDC	330 μ F	\pm 12VDC	220 μ F
--	--	15VDC	330 μ F	\pm 15VDC	220 μ F
--	--	24VDC	220 μ F	\pm 24VDC	100 μ F

DNV-6WF SERIES, 6WATT, 4:1 INPUT RANGE
FEATURES:

- ✓ 3000Vdc isolation voltage
- ✓ Metal/Plastic case with low ripple and noise
- ✓ Short circuit and input under voltage protection
- ✓ Operating temperature range -40°C to +85°C
- ✓ 3 year warranty



Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (mA)	Efficiency Typ.
DNV6W-2411F	24(9~36)	5	1200	82%
DNV6W-2415F		9	667	81%
DNV6W-2412F		12	500	82%
DNV6W-2413F		15	400	82%
DNV6W-2414F		24	250	83%
DNV6W-2421F		±5	600	80%
DNV6W-2425F		±9	333	81%
DNV6W-2422F		±12	250	82%
DNV6W-2423F		±15	200	83%
DNV6W-2424F		±24	125	84%
DNV6W-4811F	48(18~72)	5	1200	82%
DNV6W-4815F		9	667	82%
DNV6W-4812F		12	500	82%
DNV6W-4813F		15	400	84%
DNV6W-4814F		24	250	84%
DNV6W-4821F		±5	600	80%
DNV6W-4825F		±9	333	81%
DNV6W-4822F		±12	250	82%
DNV6W-4823F		±15	200	83%
DNV6W-4824F		±24	125	84%

Notes: other input and output models may available on request.

Above models are default to plastic case, you may request for the models with metal case, plus "M" in the suffix.

ELECTRICAL

Output voltage accuracy (Full voltage, full load)	+Vo	±2% max.
	-Vo	±3% max.
Line regulation	Nominal Load, full voltage	±0.5% max.
Load regulation	20% ~ 100% full load	±1% max.
Ripple and noise	20MHz BM, full load	100mVp-p max.

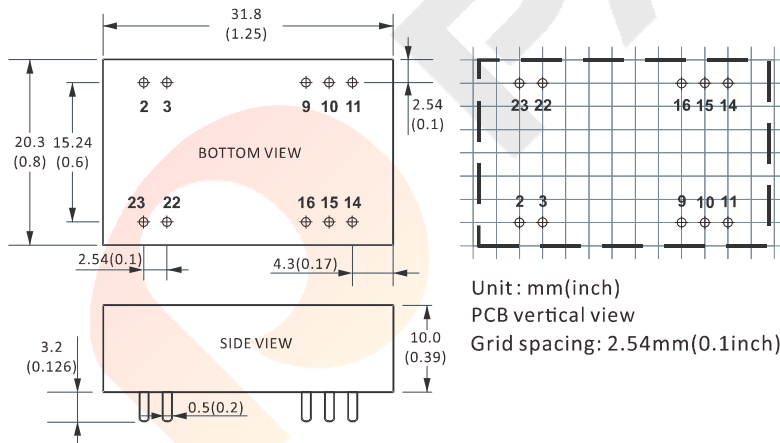
DNV-6WF SERIES, 6WATT, 4:1 INPUT RANGE

ELECTRICAL

Operating frequency	Typical value	300KHz max.
Isolation voltage (<1mA/min)	Input to output	3000Vdc
Isolation resistance	---	1000mΩ
Temperature coefficient	---	±0.03%/°C max.
Operating temperature range	---	-40°C to +85°C
Storage temperature range	---	-55°C to +125°C
Short circuit protection	---	Continuous, auto-recovery
Relative humidity	---	10%-90%
MTBF	Bellcore TR-332, 25°C	1000KHrs
Weight	---	18g

Notes: All the parameters are measured at 25°C ambient temperature, humidity < 75%, nominal input voltage, full load and after warm-up, unless otherwise specified.

MECHANICAL

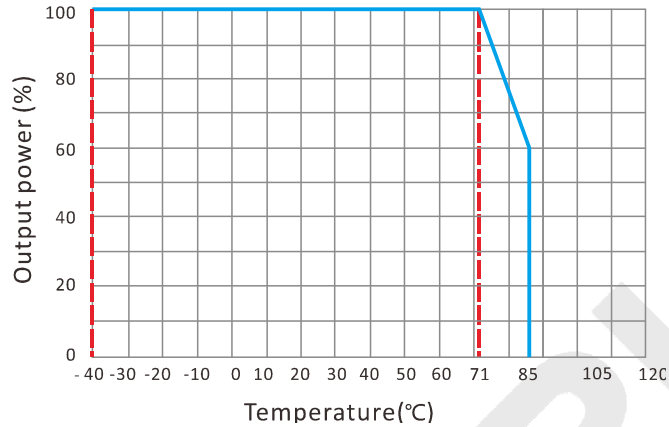
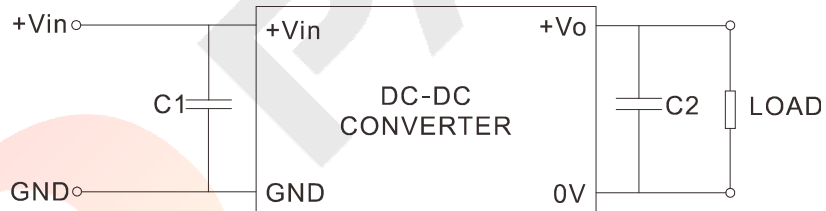
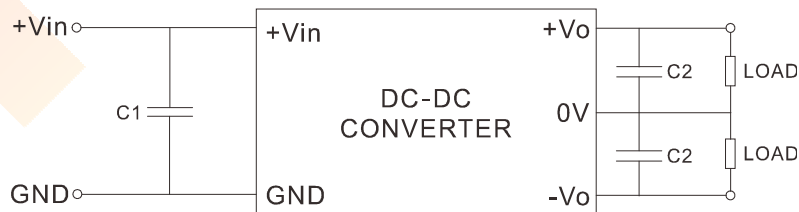


CONNECTION

PIN #	SINGLE	DUAL
2	GND	GND
3	GND	GND
9	NC	0V
10	No Pin	No Pin
11	NC	-Vo2
14	+Vo	+Vo1
15	No Pin	No Pin
16	0V	0V
22	+Vin	+Vin
23	+Vin	+Vin

Note:

* Unit is mm(inch)

DNV-6WF SERIES, 6WATT, 4:1 INPUT RANGE
ELECTRICAL CURVE

NOTES
RECOMMENDED TEST AND APPLICATION CIRCUIT
SINGLE OUTPUT

DUAL OUTPUT


DENV-6WF SERIES, 6WATT, 4:1 INPUT RANGE

NOTES

CAPACITOR SELECTION

INPUT VOLTAGE	C1	SINGLE OUTPUT	C2	DUAL OUTPUT	C2
24VDC	100 μ F	5VDC	1000 μ F	\pm 5VDC	680 μ F
48VDC	47 μ F	9VDC	470 μ F	\pm 9VDC	330 μ F
--	--	12VDC	330 μ F	\pm 12VDC	220 μ F
--	--	15VDC	330 μ F	\pm 15VDC	220 μ F
--	--	24VDC	220 μ F	\pm 24VDC	100 μ F

DNV-8 SERIES, 8WATT, 2:1 INPUT RANGE
FEATURES:

- ✓ 1500Vdc isolation voltage
- ✓ Metal case with low ripple and noise
- ✓ Continuous short circuit protection
- ✓ Operating temperature range -40°C to +75°C
- ✓ 3 year warranty



Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (mA)	Efficiency Typ.
DNV8-1211	12(9~18)	3.3	1500	80%
DNV8-1212		5	1600	81%
DNV8-1215		9	889	81%
DNV8-1213		12	667	82%
DNV8-1214		15	533	83%
DNV8-1216		24	333	83%
DNV8-1222		±5	800	80%
DNV8-1225		±9	444	83%
DNV8-1223		±12	333	83%
DNV8-1224		±15	267	83%
DNV8-1226		±24	167	84%
DNV8-2411		24(18-36)	3.3	1500
DNV8-2412	5		1600	82%
DNV8-2415	9		889	82%
DNV8-2413	12		667	82%
DNV8-2414	15		533	83%
DNV8-2416	24		333	84%
DNV8-2422	±5		800	80%
DNV8-2425	±9		444	82%
DNV8-2423	±12		333	82%
DNV8-2424	±15		267	84%
DNV8-2426	±24		167	84%
DNV8-4812	48(36-72)		5	1600
DNV8-4815		9	889	83%
DNV8-4813		12	667	86%
DNV8-4814		15	533	87%
DNV8-4816		24	333	87%
DNV8-4822		±5	800	80%
DNV8-4825		±9	444	81%
DNV8-4823		±12	333	83%

DNV-8 SERIES, 8WATT, 2:1 INPUT RANGE

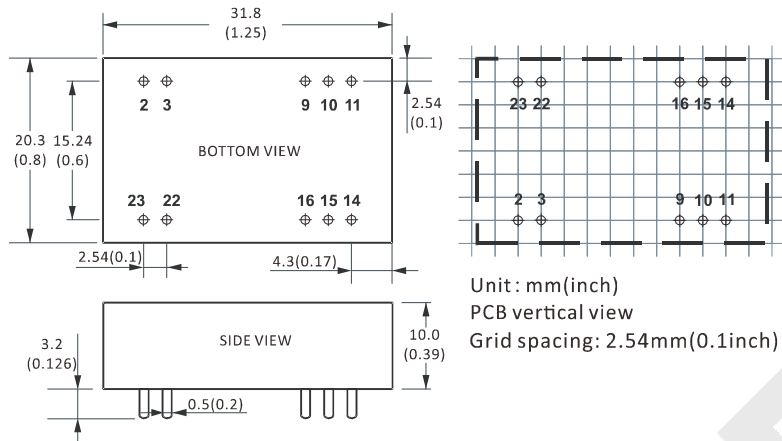
Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (mA)	Efficiency Typ.
DNV8-4824	48(36-72)	±15	267	85%
DNV8-4826		±24	167	86%

**Notes: 1. Other input and output models may available on request;
2. Above items are default to metal case.**

ELECTRICAL

Output voltage accuracy (Full voltage, full load)	+Vo -Vo		±2% max. ±3% max.
Line regulation	Nominal Load, full voltage		±0.5% max.
Load regulation	20% ~ 100% full load		±1% max.
Ripple and noise	20MHz BM, full load		100mVp-p max.
Operating frequency	Typical value		300KHz typ.
Isolation voltage (<1mA/min)	Input to output		1500Vdc
Isolation resistance	---		1000mΩ
Temperature coefficient	---		±0.03%/°C max.
Operating temperature range	---		-40°C to +85°C
Storage temperature range	---		-55°C to +125°C
Short circuit protection	---		Continuous, auto-recovery
Relative humidity	---		10%-90%
MTBF	Bellcore TR-332, 25°C		1000KHrs
Weight	---		18g

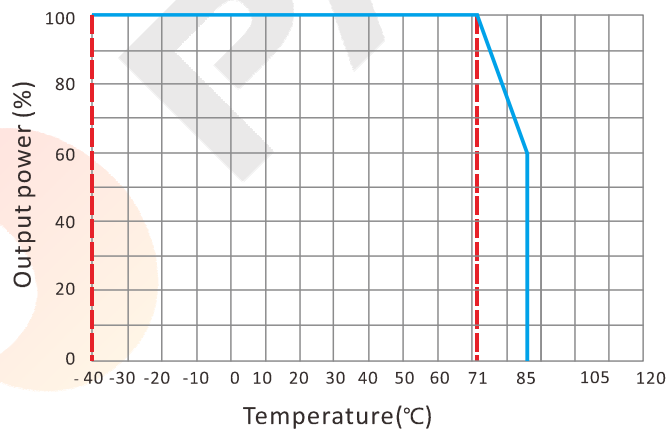
Notes: All the parameters are measured at 25°C ambient temperature, humidity < 75%, nominal input voltage, full load and after warm-up, unless otherwise specified.

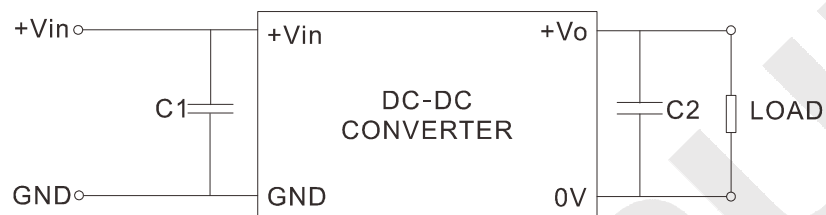
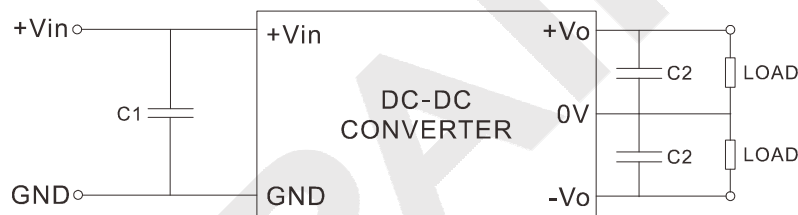
DNV-8 SERIES, 8WATT, 2:1 INPUT RANGE
MECHANICAL

CONNECTION

PIN #	SINGLE	DUAL
2	GND	GND
3	GND	GND
9	NC	0V
10	No Pin	No Pin
11	NC	-Vo2
14	+Vo	+Vo1
15	No Pin	No Pin
16	0V	0V
22	+Vin	+Vin
23	+Vin	+Vin

Note:

* Unit is mm(inch).

ELECTRICAL CURVE


DNV-8 SERIES, 8WATT, 2:1 INPUT RANGE
NOTES
RECOMMENDED TEST AND APPLICATION CIRCUIT
SINGLE OUTPUT

DUAL OUTPUT

CAPACITOR SELECTION

INPUT VOLTAGE	C1	SINGLE OUTPUT	C2	DUAL OUTPUT	C2
12VDC	100 μ F	5VDC	1000 μ F	\pm 5VDC	470 μ F
24VDC	47 μ F	9VDC	470 μ F	\pm 9VDC	330 μ F
48VDC	47 μ F	12VDC	330 μ F	\pm 12VDC	220 μ F
--	--	15VDC	330 μ F	\pm 15VDC	220 μ F
--	--	24VDC	220 μ F	\pm 24VDC	100 μ F

DNV-8W SERIES, 8WATT, 4:1 INPUT RANGE
FEATURES:

- ✓ 1500Vdc isolation voltage
- ✓ Metal case with low ripple and noise
- ✓ Continuous short circuit protection
- ✓ Operating temperature range -40°C to +75°C
- ✓ 3 year warranty



Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (mA)	Efficiency Typ.
DNV8W-2412	24(9~36)	5	1600	82%
DNV8W-2415		9	889	82%
DNV8W-2413		12	667	83%
DNV8W-2414		15	533	84%
DNV8W-2416		24	333	85%
DNV8W-2422		±5	800	82%
DNV8W-2425		±9	444	82%
DNV8W-2423		±12	333	83%
DNV8W-2424		±15	267	83%
DNV8W-2426		±24	167	84%
DNV8W-4812	48(18~72)	5	1600	82%
DNV8W-4815		9	889	82%
DNV8W-4813		12	667	83%
DNV8W-4814		15	533	84%
DNV8W-4816		24	333	85%
DNV8W-4822		±5	800	82%
DNV8W-4825		±9	444	82%
DNV8W-4823		±12	333	83%
DNV8W-4824		±15	267	83%
DNV8W-4826		±24	167	84%

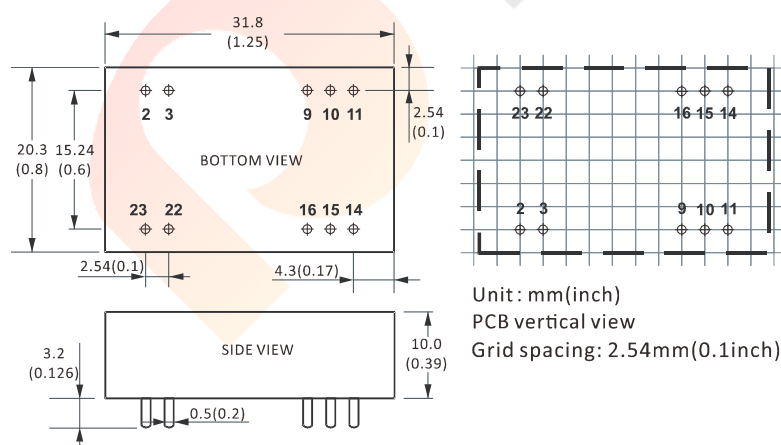
Notes: 1. Other input and output models may available on request;

2. Above items are default to metal case.

DNV-8W SERIES, 8WATT, 4:1 INPUT RANGE
ELECTRICAL

Output voltage accuracy (Full voltage, full load)	+Vo -Vo	±2% max. ±3% max.
Line regulation	Nominal Load, full voltage	±0.5% max.
Load regulation	20% ~ 100% full load	±1% max.
Ripple and noise	20MHz BM, full load	100mVp-p max.
Operating frequency	Typical value	300KHz typ.
Isolation voltage (<1mA/min)	Input to output	1500Vdc
Isolation resistance	---	1000mΩ
Temperature coefficient	---	±0.03%/°C max.
Operating temperature range	---	-40°C to +85°C
Storage temperature range	---	-55°C to +125°C
Short circuit protection	---	Continuous, auto-recovery
Relative humidity	---	10%-90%
MTBF	Bellcore TR-332, 25°C	1000Khrs
Weight	---	18g

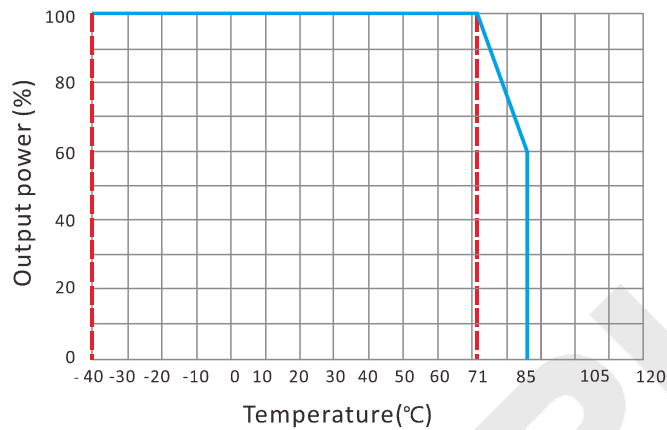
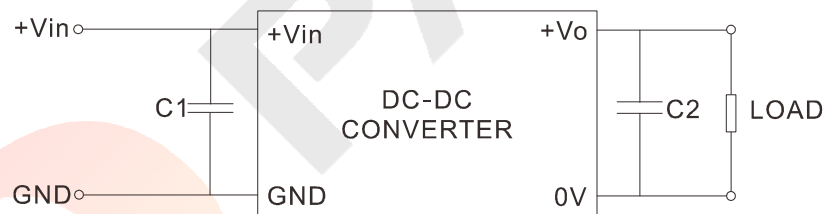
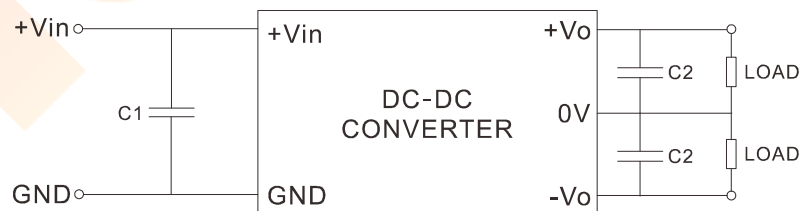
Notes: All the parameters are measured at 25°C ambient temperature, humidity < 75%, nominal input voltage, full load and after warm-up, unless otherwise specified.

MECHANICAL

CONNECTION

PIN #	SINGLE	DUAL
2	GND	GND
3	GND	GND
9	NC	0V
10	No Pin	No Pin
11	NC	-Vo2
14	+Vo	+Vo1
15	No Pin	No Pin
16	0V	0V
22	+Vin	+Vin
23	+Vin	+Vin

Note:

* Unit is mm(inch).

DNV-8W SERIES, 8WATT, 4:1 INPUT RANGE
ELECTRICAL CURVE

NOTES
RECOMMENDED TEST AND APPLICATION CIRCUIT
SINGLE OUTPUT

DUAL OUTPUT


DNV-8W SERIES, 8WATT, 4:1 INPUT RANGE

NOTES

CAPACITOR SELECTION

INPUT VOLTAGE	C1	SINGLE OUTPUT	C2	DUAL OUTPUT	C2
12VDC	100 μ F	5VDC	1000 μ F	\pm 5VDC	470 μ F
24VDC	47 μ F	9VDC	470 μ F	\pm 9VDC	330 μ F
48VDC	47 μ F	12VDC	330 μ F	\pm 12VDC	220 μ F
--	--	15VDC	330 μ F	\pm 15VDC	220 μ F
--	--	24VDC	220 μ F	\pm 24VDC	100 μ F